

Symposium

International comparisons of health care systems

What can Europeans learn from Americans?

by Alain C. Enthoven

In a wide-ranging look at many aspects of health care financing and delivery, the concepts of glasnost and perestroika are used as a framework for presenting ideas from the American system that may have value for European health care planners. These include more uniform approaches to data collection and cost reporting, patient outcome studies, evaluation of service and access standards, publication of information, quality assurance review, decentralization and independent institutions, prepaid group practice, demonstrations and experiments, and managed competition. Suggestions are offered for making health care systems on both sides of the Atlantic more manageable, efficient, and responsive.

Introduction

What can Europeans learn from Americans about the financing and organization of medical care? The obvious answer is "not much." We Americans are spending nearly 12 percent, going on 15 percent, of gross national product (GNP) on health care, while most European countries are spending an apparently stabilized 6 to 9 percent (Division of National Cost Estimates, 1987; Francis, 1989; Schieber and Poullier, 1988). The western European democracies have achieved essentially universal coverage, but some 35 million Americans—17.5 percent of the population under 65 years of age—have no financial protection against medical expenses, public or private (Short, Monheit, and Beauregard, 1989). (Those who cannot pay may get free care from community or public hospitals, after they have paid what they can. This places an inequitable burden on the hospitals that care for the uninsured and motivates them to find ways of avoiding attracting patients who cannot pay, such as by closing emergency rooms.) Millions more have inadequate coverage that leaves them exposed to large risks or to exclusions for care of preexisting conditions. At the same time, our infant mortality rate is higher than that of most of the western European democracies, but life expectancy is about in the middle of the group. A recent public opinion poll found that only 10 percent of Americans agree with the statement "on the whole, the health care system works pretty well," compared with 56 percent of Canadians and 27 percent of the British (Blendon and Taylor, 1989). So it would be, quite frankly,

ridiculous for an American to suggest that we have achieved a satisfactory system that our European friends would be wise to emulate.

Americans like to believe that we have the world's best medical care—at least for those who are insured and can pay for it. I have some doubts. For example, it has been well established that there is a pronounced negative relationship between annual volume in a hospital and mortality for complex surgical procedures such as open-heart surgery (Luft, Bunker, and Enthoven, 1979). The curve relating death rates to annual volume for coronary artery bypass graft (CABG) surgery is still descending at 150 operations a year, indeed at several hundred (Prospective Payment Assessment Commission, 1988). That is why the California Department of Health Services and the American College of Surgeons recommend minimum annual volumes of 150 for open-heart surgery. Nevertheless, in 1986, of 103 California hospitals in which open-heart surgery was performed, 37 did fewer than 150 such procedures (Steinbrook, 1988b.) This helps to explain the high death rates from CABG surgery in some California hospitals, ranging as high as 17.6 percent in 1986 (Steinbrook, 1988a). In Des Moines, Iowa, a metropolitan area with a population of 380,000, two hospitals did kidney transplants, with 1988 volumes of 8 and 15, respectively. At the university hospital about 100 miles away, the volume was 69 cases (Iowa Department of Public Health, 1989).

A recent genre in our medical literature is called "appropriateness." A panel of expert and generalist physicians reviews the literature and determines the indications for surgery: Under what conditions is it appropriate (i.e., clearly beneficial to the patient), equivocal, or inappropriate? Then a team reviews a large sample of medical records and classifies cases. Such studies have recently reported 32 percent of carotid endarterectomies inappropriate, another 32 percent equivocal (Winslow et al., 1988); 14 percent of CABG surgery inappropriate, another 30 percent equivocal (Winslow et al., 1988); 27 percent of hospital days inappropriate (Restuccia et al., 1984); 20 percent of pacemaker implants inappropriate, another 36 percent equivocal (Greenspan et al., 1988.), etc.

Somewhere in America might be found the world's best medical care. But the merits of that claim will not be apparent to the families of hundreds of Californians who have died of inappropriate or equivocal open-heart operations in low-volume hospitals, especially if the widows are being hounded for payment because their deceased husbands did not have insurance.

I could go on. We have much to be humble about.

The difficulties of writing this article are compounded by the fact that European health care

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Health Care Financing Review/Annual Supplement 1989

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systems and practices are not all the same. Their diversity exceeds that among and within the different States in the United States. If there are lessons, their relevance will vary considerably from one country to another. Moreover, our intellectual roots and cultures are intertwined. Americans and Europeans read many of the same books and professional journals. Most, if not all, of the ideas I discuss in this article have some European roots. So identifying some ideas leading to good things in America these days is not meant to deny their European ancestry.

One approach I considered was to recommend that Europeans learn from our mistakes, lest they repeat some of them. For example, various British writers, and lately Her Majesty's Government, have proposed offering tax breaks for the purchase of private health insurance (*Working for Patients*, 1989). The merits of this idea are likely to depend a great deal on exactly how it is done. But in the United States, the open-ended tax break for employer-paid health insurance has had some very negative consequences (Enthoven, 1985a). It greatly weakens the incentive of upper income people to make cost-conscious choices of health care financing plans. Considering payroll and State income taxes as well as Federal income taxes, the tax break reduces by 35 to 40 percent the marginal cost, in net after-tax dollars, of the employee's decision to choose more costly coverage. It costs the Federal budget more than \$40 billion a year—an amount that grows about 10 to 15 percent per year, and an amount that substantially exceeds Federal contributions to Medicaid, the Federal-State program that pays for health care for welfare recipients. About 80 percent of the revenue loss goes to households with above-average incomes. This subsidy offers a costly inducement to buy health insurance to many who would buy coverage anyway; at the same time, it offers little to people in low income brackets and nothing to people who have no employer-paid health insurance. There are lessons to be learned from our mistakes. The problem here is that it is hard to find Europeans who need these lessons.

Each country's health care system reflects its own history, culture, political system, and society. And incremental change is one of the most persistent themes in all of our democracies. Labour rhetoric notwithstanding, there is no prospect for the Europeans to adopt the American system or vice versa. And there is no point in discussing whose system is superior. The really interesting questions are how to identify and design politically feasible incremental changes in each country that have a reasonably good chance of making things better. Each country can get useful ideas from others about how to do this.

I like to believe that there are some things in the rich variety of American experiences that may be quite useful to some Europeans, although I recognize that other Europeans are already well informed about such developments. Even the most interesting and promising of these ideas are not uniformly or even widely applied in the United States. In this article, I

am pointing to "best practice," not average practice in America. I group these ideas under two headings: Glasnost and Perestroika.

Glasnost

Glasnost, of course, is generally understood to mean "openness," and thus published information. Beginning with this general definition, we can then expand it further to include meaningful evaluated management information, especially in health services research. Some European health care systems—at least those I have visited—struck me by their lack of relevant management information and evaluation studies based on such information. It appears to be a fair generalization that many European health care systems have not developed and put into use the tools of management information and control that any modern industrial enterprise would consider necessary to plan and manage efficiently. Nor do they take much advantage of their opportunities for research. Volvo, Mercedes, and BMW would not be selling nearly as many cars in California as they do if they attempted to conduct their operations with so little information. Nor has our health care system taken advantage of such opportunities on a wide scale.

Until recently, few policymakers have considered efficiency to be a relevant or appropriate goal for the health care system. In the western European and North American democracies, social policy was initially preoccupied with equity, with extending equal financial protection and access to health care services to most or all of the population. In more recent years, as health care expenditures have grown rapidly as a share of GNP, limiting the growth of spending has become the great preoccupation. But until recently, the efficiency with which resources were used has rarely been addressed in any fundamental way. The creation of institutions that would systematically motivate efficient behavior by providers has received even less attention. Efficiency in the use of resources has not been a part of the culture of our medical professions.

Moreover, the problems in defining and obtaining meaningful information about efficiency in medical and hospital care are exceptionally complex and subtle. Many simple measures, such as a hospital's cost per bed-day or in-hospital mortality unadjusted for medical risk, can be quite misleading. Average cost per bed-day can be reduced by needlessly prolonging hospital stays. The patients of the best surgeon in the country may have a high mortality rate because the sickest patients are referred to him or her. So, development of a really satisfactory system of management information will be a formidable intellectual task. Moreover, before the advent of modern information technology, the collection and processing of the types of data I discuss would have been prohibitively costly.

So, my purpose is not to criticize anyone for the lack of management information. There are good reasons why the "information revolution" in medical

care did not happen sooner. But Europeans now have great opportunities to take major steps forward by implementing nationally some of the best ideas being developed in America. European health care systems are more organized than ours, and people do not move around as much, so it should be much easier to keep track of what happens to most patients. Europeans could now take advantage of powerful, flexible, and economical information technology to achieve truly valuable systems of medical and financial information for planning, management, analysis, and evaluation. First, I suggest some opportunities for institutionalized production of information; then I identify research opportunities.

Uniform hospital discharge data reports

Apparently uniform reporting to a central authority of all hospital inpatient cases is not mandatory in most European countries. For example, in Sweden I learned that there are discharge reports but that not all hospitals report, nothing compels them to report, and the reports are not very detailed. It is therefore difficult to compare efficiency by hospital or region without reliable summary reports on many aspects of hospital operations (e.g., per capita admission rates by age and sex, procedure rates per capita, death rates by procedure).

One good place to begin such information production would be with a system of mandatory reporting to a national data bank of all hospital discharges, including the following information:

- Personal identification.
- Date of birth.
- Sex.
- Residence.
- Hospital identification.
- Dates of admission and discharge.
- Identification of attending physician and operating physician, if there was a procedure.
- Diagnoses.
- Procedures and dates.
- Disposition of patient (i.e., alive or dead, discharged to home or to an institution).

This list comes from the Uniform Hospital Discharge Data Set (UHDDS), which must be reported for all care paid for by Medicare and Medicaid (two large Government programs that pay for care for the aged, disabled, and welfare recipients) and for all hospital cases in some States, such as California and Maryland (U.S. Department of Health and Human Services, 1985). In addition to these data, it may well be that additional information, such as some key diagnostic measurements, should also be included. The UHDDS has served as a foundation for developing diagnosis-related groups (DRGs), comprehensive longitudinal records, risk-adjusted measures of outcomes, outcomes management, utilization review, and peer review, which are discussed later in this article. For these developments to take place, it has been necessary that these data,

with individual patient identification removed, be available for use by health services researchers.

Mandatory reporting alone is not enough to produce good data. The data have to be put to significant uses for the people who prepare it, so that they will be motivated to make it accurate. Both doctors and medical records technicians must be involved in coding. American experience suggests that there is a substantial potential for error (or at least disagreement) among people who prepare discharge reports. The Institute of Medicine of the National Academy of Sciences did a study in which specially trained medical records technicians prepared new abstracts from hospital records for discharges in 1974 and then compared them with reports already submitted by leading private abstracting services. The study found that the old and new abstracts agreed on principal diagnoses in 65 percent of cases and on procedures in 72 percent of cases (Institute of Medicine, 1977). Therefore, a data commission or board is needed to provide leadership in a continuing effort to improve the coding of information, including clarifying definitions, ruling on disagreements, and requiring audits to check on accuracy. There will be some hospitals that will be reluctant to report on a timely basis. So there must be some real penalty that actually can and will be applied, such as the nonpayment of State subsidies, if timely reports are not submitted. In the American Medicare program, the hospital is not paid for a case until it has submitted a satisfactory discharge report signed by the attending physician.

National uniform hospital cost accounting

I have asked a number of people in Britain, France, the Netherlands, and Sweden to tell me how the average costs per case for particular types of cases compared among hospitals. I was told that such information was not available. (American hospitals can all say what they charge for various types of cases, but few can say what their costs are, and many of their managers do not know the difference.) If European hospital managers had such information, they could analyze and compare medical and management practices in different hospitals to identify the best, i.e., the most cost-effective, practices. Regional and county managements could use the same information as a guide for resource allocation, as, for example, in deciding which services to expand. In the United States, there can be quite wide variations in the charges and apparent costs among hospitals for similar cases, e.g., more than a threefold variation in median charges for CABG surgery among Los Angeles hospitals in 1986 (Steinbrook, 1988a). At least one American management consulting firm has developed a successful business by working with groups of hospitals to identify "best demonstrated practice" in each department (Johnson, 1983). They found variations averaging 40 percent in the cost to treat the same kind of case, and thus substantial opportunities for savings.

The European health care systems could open up significant opportunities for efficiency enhancement by developing and implementing systems of hospital cost accounting capable of producing cost reports for "intermediate products" (such as laboratory tests and X-rays) and "final products" (individual patient cases). With such a system, it would be possible to compare cost per test and cost per case (e.g., CABG surgery in different hospitals) to pinpoint just how and where less costly hospitals save money. As an example of such a system, Sweden's Uppsala Academic Hospital has contracted with Transition Systems, Inc., for installation of a cost-accounting system developed at the New England Medical Center in Boston.

In the European nonmarket systems, I believe there is a case for a uniform national system, at least down to the level of cost per case by type of case, despite the preferences of many hospital administrators to be free to develop their own systems. In a market system, people use prices as indicators of the costs of goods and services they are thinking of buying. It does not matter whether all producers use the same system of cost accounting, because their customers will compare quoted prices. But in the nonmarket systems, such as in the United Kingdom and Scandinavia, there are few or no prices. Cost comparisons must be based on cost information. In this case, there are two reasons to prefer uniform national systems. First, without a truly uniform system, every proposed cost comparison is likely to bog down in detailed arguments about why one hospital's data are not comparable with another's. People who do not want to be compared can prevent comparisons by raising issues of accounting definition. Second, such systems are costly to design and implement. It would be more economical for each country to use a single system. American experience suggests great resistance to such uniformity. Attempts by the U.S. Government to require uniform cost reporting in the early 1980s failed in part because hospitals consider detailed cost information to be trade secrets in our competitive, pluralistic system. As in the case of discharge data reports, auditing and supervision by an accounting principles board would be needed to put life into this idea.

Diagnosis-related groups

In the 1970s, a team at Yale University developed a system for describing a hospital's production called diagnosis-related groups (DRGs) (Fetter et al., 1980). In 1983, the Medicare program adopted the prospective payment system (PPS), based on DRGs. All inpatient cases are classified in one or another of about 470 DRGs that are relatively homogeneous with respect to resource use, and hospitals are paid a fixed price per case, depending primarily on the assigned DRG. Medicare DRGs are now updated each year, based on the latest available information. PPS has not solved all of Medicare's cost problems. The physician fee and outpatient care part of Medicare remains

open-ended and out of control. But PPS has had great success in slowing the growth of real inpatient cost per beneficiary. From 1980 to 1983, real Medicare inpatient costs per beneficiary rose 6.8 percent per year; from 1983 to 1984, they rose 2.7 percent.

Kaiser Permanente, our largest nongovernmental medical care organization, uses DRGs as a management tool. Hospital administrators in their Southern California Region are evaluated on the basis of their ability to control their cost per case, with DRGs used to measure case mix. Hospital administrators with costs per case above the average have been directed to bring their costs down to the level of costs in the low-cost hospitals. I have been told that this innovation has led administrators in the high-cost hospitals to become very interested in how the low-cost hospitals achieve their favorable results, and that cost differences have been narrowed considerably.

DRGs are being studied actively in Europe. The most promising use for DRGs in Europe that I can see is as an indicator of a hospital's total inpatient workload or output, to serve as a denominator in a calculation of cost per case. Although it is not perfect, it is the best available indicator of hospital inpatient case load. There are continuing unresolved issues about differences in severity of illness within DRGs, and research is under way to produce a more refined system. Medicare has experienced some "DRG creep," that is, a change in reported case mix for what appears to be in fact the same case mix. But these problems have proven to be relatively minor. Again, regular audits are needed.

Like Kaiser Permanente, European health care systems might evaluate and compensate hospital managers in part on the basis of their ability to control and reduce growth in cost per case, using DRGs. Europeans would need to develop their own sets of DRGs, based on their own medical practices. To get an adequate sample size, the smaller countries would need to form groupings.

Research is now under way in the United States to develop systems for long-term care and ambulatory care that would be somewhat similar in purpose.

Studies of medical practice variations

John E. Wennberg, M.D., professor of medicine at Dartmouth Medical School, has pioneered in the study of geographic variations in medical practice patterns. In an early study of variations in incidence of surgery in different hospital service areas in Vermont, he found a greater-than-eightfold variation in the per capita incidence of tonsillectomy and adenoidectomy from the lowest to the highest areas (Gittelsohn and Wennberg, 1977). Nonphysicians used to think that there were well-established scientifically based standards for medical practice. Wennberg's studies made us aware that this was not the case. As Wennberg has effectively illustrated with data, there is great uncertainty and differing opinion associated

with much of medical practice. And there is a widespread lack of scientific data, especially on the quantitative aspects of medical decisionmaking.

In addition, Wennberg found that feeding data back to doctors led the high users of some procedures to cut back (Wennberg et al., 1977).

Wennberg has teamed up with Europeans to study variations in common surgical procedures in New England, England, and Norway. Similar degrees of variability in surgery rates were found in England and Norway as were found in New England (McPherson et al., 1982). McPherson and colleagues at Oxford have done similar studies (McPherson et al., 1981). With a national uniform hospital discharge report, it should be possible for each country to prepare regular reports of age-sex standardized per capita rates of hospitalization by DRG and procedure, by district, department, or county of patient origin. Such reports, when fed back to doctors, would help "outliers" to see where they are. These data might complement cost-per-case reports. A "low-use" district might justify higher costs per case in certain diagnoses, because fewer patients are hospitalized there than in other districts and only when they are sicker. These data could be used to target for further study areas of high medical uncertainty affecting large numbers of patients.

Comprehensive longitudinal patient records

One of the large handicaps under which American physicians work is a lack of longitudinal data on outcomes of care. Unfortunately, most surgical patients can be followed systematically only to the hospital door. Registries are kept for some patients in some institutions, but these are quite limited in scope. Continuous comprehensive records exist for long-term members of some health maintenance organizations, but usually these are not electronically stored and easily retrievable. Patients in some controlled clinical trials are followed for years. Dr. Wennberg has recently linked Medicare inpatient and outpatient records and Social Security records (which record survival) for Medicare beneficiaries in New England. This has enabled him to follow histories of surgical patients over an 8-year period to see what happens to them. For example, a recent study of patients who had undergone transurethral resection of the prostate found a considerably greater incidence of mortality, complications, and reoperation than previous professional consensus held (Wennberg et al., 1988). Similar records exist in the Provinces in Canada.

The development of standardized longitudinal records has been inhibited in the United States by the decentralized and pluralistic nature of the American health care system. Nobody is in charge to direct such a development. Americans regularly change insurance carriers and providers as they move, change jobs, or merely exercise their choices. Medicare may offer us our most promising data source, because practically all Americans are enrolled in Medicare at age 65 and remain in it for the rest of their lives. Because

European health care systems are more homogeneous and people do not move around as much, it should be far more feasible for Europeans to keep track of each patient's medical history in a standardized way.

Wennberg's work shows that problems such as preserving confidentiality can be managed and that analysis of such longitudinal data—possibly supplemented by followup questionnaires and other studies—can provide very important information about the outcomes of different treatments.

Risk-adjusted measures of outcomes

An important and promising new development in the United States has been called risk-adjusted measures of outcomes (RAMO) by Dr. Mark Blumberg of the Kaiser Permanente Medical Care Program (Blumberg, 1986). The steps in this process as he describes it are as follows:

- Select a study population.
- Select a clinical care subject (e.g., a procedure or event).
- Select appropriate measures of outcome.
- Identify independent variables that measure risk of adverse outcome (e.g., birthweight, age, presence of multiple diagnoses).
- Develop a technique to estimate expected risk of adverse outcome (e.g., multiple regression, recursive partitioning).
- Estimate the probability of adverse outcome for each case.
- Compare the actual number of adverse outcomes with the expected number for each provider.
- Where there are significant differences, investigate them.

The first example of a risk-adjusted measure of outcomes was R. L. Williams' study of perinatal mortality in California (Williams et al., 1980). The Williams study is now an annual report that compares actual with expected perinatal mortality for every hospital in California. Blumberg has recently analyzed mortality from elective surgery in Maryland (Blumberg, 1988). And the Health Care Financing Administration, which administers the Medicare program, is reporting risk-adjusted mortality by hospital for Medicare patients.

This research is still in its infancy. As Blumberg emphasizes, there are many difficult problems to be overcome, including data accuracy, development of good risk-adjustment models, identification of appropriate outcome measures, and overcoming statistical bias in estimation. Publication of RAMO studies in the United States has been criticized by some physicians on the grounds that "it could be misleading." But analysis of such data, interpreted by people using informed judgment, is really all we have to go on in evaluating outcomes of care. There is no other scientific way of evaluating the quality of care. In the United States, providers have resisted publication of any data that could link results with specific providers. But growth in health care

expenditures has forced government and employers to take cost-cutting measures. In response, providers have argued that cost containment would threaten the quality of care. This, in turn, has led government and employers to start measuring the quality of care directly and to take action to correct poor quality care. When significant variations in risk-adjusted outcomes are identified, they should be investigated. In California, risk-adjusted mortality rates for CABG surgery in 1986 ranged all the way from 1.0 percent to 17.6 (Steinbrook, 1988a). The methods used by the best hospitals should be considered for adoption by the worst hospitals. Prospective patients should have a right to such information.

European health care systems ought to designate at least one center in each country for RAMO and embark on a systematic well-funded research and development program to monitor outcomes of care. American experience shows this could be done.

Outcomes management

Dr. Paul Ellwood, chairman of the influential health policy research institute InterStudy, has recently proposed a bold concept he calls "outcomes management . . . a common patient-understood language of health outcomes; a national data base containing information and analysis on clinical, financial, and health outcomes that estimates . . . the relation between medical interventions and health outcomes . . . and an opportunity for each decision-maker to have access to the analyses that are relevant to the choices they must make" (Ellwood, 1988). InterStudy is now working with participating medical centers to implement outcomes management by defining the common data set. The proposed data base will include patient description, diagnostic information, therapies, periodic reports by the patient on quality of life, specific medical results, and complications peculiar to the patient's illness or therapy (InterStudy, 1988).

Dr. William Roper, until recently head of the Health Care Financing Administration, and associates responded to Ellwood's proposal with an "effectiveness initiative" . . . "a four-step process involving monitoring, analysis of variations, assessment of interventions, and feedback and education. In Step 1, monitoring, an ongoing universal data base composed of all Medicare claims is used to characterize the health status of the population involved, . . . monitor the outcomes of various interventions, . . . and screen for emerging beneficial or adverse trends. . . . In Step 2, the goal is to describe and define variations in medical care, in terms of both practice patterns and outcomes. Such studies may be population-based . . . or may examine the effect of certain interventions. . . . In Step 3, interventions are assessed. . . . Step 4 concerns feedback and education" (Roper et al., 1988).

This is an important idea, not yet an achievement. As with the other ideas I have mentioned, this one has European antecedents. Florence Nightingale first

proposed this more than 100 years ago, so this is not particularly an American idea. If successful, this initiative could open up large and valuable sources of data regarding what does and does not work and for whom. This could lead to substantial improvements in medical practice. As mentioned earlier, progress in the United States has been inhibited by the diversity, independence, and pluralism of our health care financing and delivery arrangements. Europeans would have an easier time of it, because of their unified comprehensive health care system, and should pursue outcomes management aggressively.

Service and access standards

British and Swedish people complain about access to doctors and about insensitivity of the health care system to reasonable patient demands. Saltman and von Otter (1987) summarized the Swedish problems in these terms: ". . . non-medical characteristics of service delivery often respond more to the internal interests of the provider organizations rather than valid concerns of the patient . . . the continued rationing by queue of certain elective surgical procedures . . . inability to accommodate fundamental differences in treatment preferences . . . long waiting room times, inconvenient appointment hours, . . . complicated regulations regarding delivery sites, poorly coordinated services, and so forth." Dr. David Owen has written of the British situation, "The public concern about NHS [National Health Service] is expressed by 'waiting': waiting for an appointment; waiting then in hospitals or in surgeries for the doctor; waiting to come into hospital; waiting at home for the promised visit. Those who work in the NHS, particularly doctors, have grown to accept too easily that waiting is inevitable." (Owen, 1988).

Poor service to patients is not an inevitable part of medical care, even in large institutional settings. All of our health care systems could learn important lessons from the best companies in service industries such as hotels, restaurants, and airlines. In the United States, large multispecialty group practices have had to work hard on the design and operation of their systems to improve patient access to compete effectively with solo and small group practices. Kaiser Permanente has experimented with detached primary care clinics of various sizes and with primary care panel systems. They have found that waiting times can be reduced and patient satisfaction improved by implementing procedures designed on the basis of management engineering and operations research studies. For example, appointment scheduling has been improved through use of a computerized "airline reservation" type of system. Access to doctors on the same day that the request is made has been improved by reserving a number of places in each doctor's schedule for same-day appointments; the actual number reserved is equal to the statistically estimated demand for that day. Knowing that Monday morning is a time of exceptionally heavy telephone demand, the organization cross-trains some personnel to answer

telephones on Monday mornings, while performing other duties the rest of the time. Improved systems of electronic storage and retrieval of records offer great potential for saving doctors' and patients' time.

NHS regions and Swedish county governments could contract with independent market research organizations to measure patient preferences regarding different combinations of service aspects of the health care system. Based on the results, they could develop and publish service and access standards, create systems of measurement of performance in relation to those standards, and regularly publish the results. Examples of such standards might be along the following lines:

- Patients should not have to wait more than 3 months for elective surgery.
- Ninety-five percent of telephone calls to primary care centers should be answered by the sixth ring.
- Primary care centers should be open and staffed a certain number of evening and weekend hours.
- Waits for appointments (excluding routine physical and eye examinations) should not exceed 3 weeks.
- Ninety-five percent of in-office waits to see the doctor should be less than 30 minutes from the scheduled time.

These data must be interpreted with judgment. Waiting lists can be manipulated by providers to strengthen their case for more resources. But these data can be used to assess relative service efficiency in different centers. Comparative performance can be assessed, and poor performers can be encouraged to adopt the practices of the best performers.

Measuring patient satisfaction

As a part of the Health Insurance Experiment, Allyson Davies and John Ware at the RAND Corporation developed a patient satisfaction questionnaire to evaluate the impact of different health care financing arrangements on patient satisfaction (Davies and Ware, 1988). Some American employers are now polling their employees about their perceptions of the quality of their health care and feeding back the results to the health care organizations that serve them. This is intended to identify needs and motivate improvements in service and care. To provide useful information, the questions should be focused quite sharply on specific aspects of service delivery. For example, one employer asks whether employees have experienced a wound infection after surgery or a medical problem at the end of a stay in the hospital that they didn't have before they entered the hospital. Researchers know that the answers depend on how the questions are framed. So it makes sense for the questionnaires to be designed and administered by organizations that are independent of the health care system and that have a consumer point of view. Patients themselves are a great potential source of information about the quality of care and service they receive. The practice

of obtaining such information and using it is not yet well developed in America. But I believe it is potentially important, and I include it for the sake of completeness of the glasnost story.

Publication of information

European voters and public policymakers would be helped in their decisions if the results of all this data gathering and analysis could be interpreted and published in a way that would be accessible to them. For example, it would be very helpful if newspapers would make the investment to develop a corps of a few journalists with the special background needed to understand and responsibly interpret data on the health care system for the general public. This type of reporting might be done by physicians with some postgraduate education in quantitative management tools.

For example, the *Los Angeles Times* has employed Robert Steinbrook, M.D., as a medical writer. Here are some examples of headlines and lead sentences from Dr. Steinbrook's recent articles: "Care for Newborns Varies, Studies of Hospitals Show . . . California's hospitals vary widely in their ability to provide quality medical care to newborn babies, according to a sophisticated hospital-by-hospital analysis of perinatal death-rate data by researchers at the University of California, Santa Barbara." (Steinbrook, 1987.) This article reports the results of R. L. Williams' RAMO study for the years 1980-84. "Heart Surgery Death Rates Found High in 1 in 6 Hospitals . . . Nearly one-sixth of California hospitals with heart surgery programs had significantly high death rates for heart bypass patients in 1986, according to a *Times* analysis of data covering all such operations in the state" (Steinbrook, 1988a). This article reported the results of a study actually commissioned by the *Times* and performed with the assistance of three leading academic health services researchers at the University of California. A third, "U.S. Issues Data About Hospitals' Death Rates," described a risk-adjusted mortality study of Medicare beneficiaries published by the Health Care Financing Administration (Steinbrook and Rosenblatt, 1987). This article published mortality rates for California hospitals significantly above and below average, for all Medicare patients, and for patients with several specific diagnoses. The names of the hospitals were published, and the sky did not fall in. Nor have the patients fled the poorly performing hospitals, which is a disappointment to those of us who believe informed consumer choice is potentially a powerful force for good. If Europeans are looking for incentives to improve efficiency and effectiveness in their health care systems, it seems reasonable to suppose that the professional pride of doctors and managers would motivate many of them to take energetic and imaginative action to avoid appearing on the list of the worst departments or hospitals.

Utilization review

In the 1970s, our Congress created professional standards review organizations (PSROs) to review the use of services in the Medicare and Medicaid programs. These were local nonprofit cooperatives of doctors in each of about 200 health service areas. Studies in the late 1970s showed that these organizations were ineffective in reducing Medicare utilization (Ginsburg and Koretz, 1979). This was not surprising. There was no incentive for PSROs to be effective. A dollar saved in Medicare in California, at the expense of California doctors and hospitals, was a dollar returned to Washington.

In the 1980s, PSROs were replaced by peer review organizations (PROs). These are independent organizations in each State that contract with the Health Care Financing Administration to review the quality and appropriateness of care. These organizations compete to win and keep PRO contracts, so they have a real incentive to produce results. They use statistical "screens" to identify problem areas meriting detailed examination, and they use experienced physicians in the appropriate specialty to evaluate the care given. We do not have broadly based studies evaluating the effectiveness of the PROs.

Our many private sector insurance carriers engage in a great deal of utilization control and review activities, mostly for inpatient hospital care. They engage in preadmission review and authorization for nonemergency admissions, concurrent review, and discharge planning. There is little controlled evaluation of all this activity. One controlled study reports that a Blue Cross utilization review program reduced hospital admissions by 12.3 percent, inpatient days by 8.0 percent, and hospital expenses by 11.9 percent (Feldstein, Wickizer, and Wheeler, 1988). We have no documented evidence of effects on quality. In any case, inpatient hospital admissions and days have been declining markedly in this decade. For example, total admissions for people under 65 years of age fell about 9.0 percent from 1984 to 1986.

The utilization review approach to quality and economy of care in the United States attempts to correct the deficiencies in a system the basic incentives of which do not motivate quality and economy to begin with. This approach has several fundamental defects. First, it looks for outliers, "bad apples" that can be identified, punished, and removed. There is no doubt that we have bad apples that ought to be removed. But this approach contributes to an atmosphere of fear, defensiveness, and resentment among physicians, and this atmosphere may be counterproductive in the quest for better quality. By definition, outliers are a small minority. And this month's outlier may be next month's average performer. Removal of outliers will not do much to improve average performance. A second defect in the utilization review approach is that it is too costly, if not impossible, to detect and control the behavior of doctors who are motivated to defeat the utilization

control system. Such controls may have a useful effect on inpatient care, but ambulatory care is another matter. The indications for care are too numerous, too uncertain, and too changeable for a police force of reasonable size to be able to keep up. Some system of auditing and real public accountability is needed. But negative restraints in the face of inappropriate incentives seem unlikely to be nearly as effective as positive incentives to do the right thing to begin with. What we all need are systems of organization of care that include evaluation and feedback as a positive incentive to motivate continuous improvement in average performance. For the most part, American systems of utilization review and control are symptoms of the fact that we have not yet achieved that desirable state. We all need to think carefully how this can best be done.

Perestroika

Decentralization and independent institutions

American health care may suffer from an excess of pluralism, diversity, and innovation, without an effective market system to encourage the high-quality economical providers while driving out the low-quality and costly providers. But European health care systems, either of the public or highly regulated private variety, often appear frozen, resistant to innovation and change in financing or organization of delivery.

This is not surprising. There are several reasons public systems in Europe or the United States are especially resistant to change. First, there is what Charles Schultze has called the rule of "Do no direct harm. . . . we cannot be seen to cause harm to anyone as the direct consequence of collective actions" (Schultze, 1977). Thus we find it extraordinarily difficult to close an unneeded public hospital or military base. Second, politicians are understandably risk-averse. Most of the innovations people think of prove not to be good ideas, despite the positive connotation of the word. But this can often be discovered only in actual practice. So if politicians try something, the odds are it will fail and they will be blamed. If it succeeds, the rewards are usually quite limited. In the private sector, people can take risks with their own money. In the public sector, the risk-reward ratio often does not favor innovation. And third, most public sector services are monopolies.

On the whole, we have benefited from our Federal system of government. Health care finance and regulation is a mixed Federal-State responsibility. Californians can try many things that appeal to them without being blocked by New Yorkers, who are culturally quite different from Californians. Unitary states in Europe give proposed innovations an "all or none" character.

In the spirit of 1992 (when the trade barriers come down), the different countries of Europe can fill the role of the separate American States. Europeans should build on their practice of studying and learning

from each other's experiences, while avoiding legislation that would force uniformity. And within their own countries, Europeans would do well to think more seriously about decentralization, to accommodate more diverse preferences, and to create a climate more tolerant of experimentation.

In the United States, we benefit greatly from the existence of independent nonprofit institutions in the fields of health, education, and social welfare. Indeed, most of our famous universities and hospitals are in that category. These institutions depend on a variety of sources of support, including payments from those they serve, tax-deductible contributions, and grants and contracts from foundations and governments. The element of consumer and provider choice is important. All this creates a framework that fosters diversity and innovation. For example, in health care, we have benefited greatly from the existence of independent nonprofit prepaid group practices (as discussed in the next section). Doctors in the traditional sector tried hard to stop them, including using the power of the State. We never would have had this important innovation, if health care had been entirely provided or controlled by the public sector. The public sector is inherently the protector of the status quo. The established interests have all the power. Our independent nonprofit institutions are usually more socially responsible and long-term oriented than the for-profit sector, but less rigid than the public sector.

Of course, independent (nongovernmental) institutions in health care and finance also exist in Europe. The sickness funds of Belgium, the Netherlands, and the Federal Republic of Germany are independent nonprofit institutions, as are many of their hospitals. Britain has independent provident associations as well as independent hospitals, both nonprofit and investor-owned. The challenge for European societies is to find ways to expand the roles of independent institutions to take advantage of their flexibility and potential for innovation, without sacrificing the social goal of universal access. For example, the British Government is now proposing to transform NHS hospitals into self-governing NHS Trusts, potentially a very productive step in the direction of greater decentralization and greater tolerance of innovation (*Working for Patients*, 1989).

Prepaid group practice

There has been a great deal of European interest in American multispecialty prepaid group practice, (e.g., Kaiser Permanente, Harvard Community Health Plan, and Group Health Cooperative of Puget Sound). I use the term "prepaid group practice" rather than "health maintenance organization" (HMO), because the latter is quite nonspecific and is also used to describe what amounts to insurance arrangements with little actual organization and management of care. There has been a great deal of research and documentation of the performance of these organizations (Luft, 1981; Manning et al., 1984).

Prepaid group practices combine multispecialty group practice and periodic, per capita payment set in advance in a competitive marketplace. The patients always have an annual choice of health plan, so the prepaid group practice has some incentive to solve patients' medical problems while holding down the cost—in short, to give value for money. This feature probably makes prepaid group practice unique, and therefore understandably an object of considerable interest. Their incentive to seek efficiency in the United States is often attenuated by a lack of serious competitors and by employer practices and features of our tax laws that subsidize employees' choice of more versus less costly health care arrangements. Nevertheless, these organizations have developed a number of characteristics worthy of study and emulation by others.

Prepaid group practices have attracted the loyalty, commitment, and responsible participation in management of their doctors. They have managed to bridge the cultures of medicine and management. Doctors and managers work together in an atmosphere of mutual respect. Management principles are applied to matters of quality and economy of care. The opportunity for continuous quality improvement is enhanced by the fact that the doctors are full-time salaried members of the organization, not independent operators with no organizational commitment. In prepaid group practices, making the correct diagnosis promptly and treating the patient without causing complications are rewarded. (In the fee-for-service system, failure to make a prompt diagnosis results in more visits and more money for the doctor.) These organizations have been leaders in systematic quality measurement and control. They match resources used to the needs of the population served, including numbers and types of doctors. Thus, in each specialty, doctors have full schedules seeing and treating patients whose problems fit their specialty. This is good for proficiency and economy. Doctors can make a good living at a low cost per case because they have lots of cases, and they are not under economic pressure to do procedures that are not really indicated. All this is in marked contrast to our fee-for-service solo practice system, which now has an excess of doctors and no effective way of aligning numbers of doctors to patients' needs. The prepaid group practices concentrate specialized services in regional centers to assure economies of scale and experience. They have pioneered the use of treatment settings less costly than inpatient hospital care: outpatient day surgery, many other treatments on an outpatient basis, and home nursing. They have orderly processes for technology assessment and organized responses to changes in technology. (Doctors in fee-for-service solo practices have powerful incentives to deny the validity of new information that is negative about their "bread and butter" procedures. A large multispecialty group can assist the doctors to retrain in other procedures.) Also, these organizations have innovated efficient use of paramedical personnel, such as nurse practitioners.

A unique feature of prepaid group practice is systematic regular professional interaction of generalist and specialist physicians. With relative ease, the generalist can call on the specialist for consultation in which they can examine the patient and discuss the treatment together. This contributes to the professional education and stimulation of the generalist and keeps the generalist's perspective of the whole patient in the picture when the specialist becomes involved. The generalist need not fear "losing the patient" when he or she makes a referral, and the specialist need not fear a loss of business from assisting the generalist to care for the patient. Professional checks and balances help to moderate single specialty points of view.

Some of these features can be found in some European health care systems, but not in others. For example, with respect to regional concentration of specialized services, Kaiser Permanente probably resembles the British and Swedish systems more than the typical American setting.

Some European countries may find it advantageous to attempt to create similar organizations. For example, Launois et al. (1985) have proposed an adaptation of the idea as an experiment in France. The recent proposal of the British Government to create some budget-holding general practitioner (GP) group practices draws some inspiration from the same idea. Alternatively, many Europeans would do well to examine prepaid group practices for detailed ideas on how to improve efficiency.

None of our countries will achieve a truly satisfactory health care system until we find a way to create internal incentives and dynamism for quality, economy, and good customer service. The model of prepaid group practice in a competitive environment comes as close to that as we have seen.

Demonstrations, pilot projects, and experiments

In the United States, we have gained a great deal of useful information from demonstration projects and social experiments in health care and other fields. The Office of Research and Demonstrations of the Health Care Financing Administration directs and supports more than 300 research, evaluation, and demonstration projects related to the management, organization, and finance of Medicare and Medicaid, our public health care financing programs for the aged and the poor (Health Care Financing Administration, 1989). And other agencies such as the National Center for Health Services Research and Health Care Technology Assessment sponsor and conduct many more. Faculty members from leading research universities and institutes participate in the research designs, and generally a high standard of research design is achieved. Some examples follow:

Medicare and health maintenance organizations—Until 1985, care for Medicare beneficiaries was paid for on the basis of fee-for-service and cost

reimbursement (or DRGs), even if the beneficiary got his or her care from an HMO. In the 1970s, there were legislative proposals to pay HMOs on a per capita basis, but no action was taken until the late 1970s, when a new law was proposed, providing for Medicare per capita prepayment of HMOs. The Health Care Financing Administration (HCFA) contracted with four HMOs to test the proposed payment method. The test was a success (Greenlick, Lamb, and Carpenter, 1983). Many fears expressed by the critics were shown to be unfounded. A new law was enacted in 1982 to implement the results of the experiment, and the law went into effect in 1985. Subsequently, 1 million Medicare beneficiaries joined HMOs on a "risk-basis" capitation contract. Now HCFA is sponsoring a dozen followup studies of refinements to the Medicare HMO payment methodology.

The health insurance experiment—Does requiring patients to pay 25 percent of their medical bills, up to an annual limit on out-of-pocket costs (as compared with free care), reduce the use of services? Is it more likely to reduce inappropriate, rather than appropriate services? Does it harm patients' health? The RAND Corporation, under a long-term contract with the Department of Health and Human Services, conducted a long-term, multisite, randomized controlled trial of alternative health insurance arrangements. They found that requiring a 25-percent coinsurance payment reduced spending by about 19 percent, compared with no coinsurance requirement and, with a few small exceptions, had no discernable effect on health (Newhouse et al., 1981; Sloss et al., 1987; Brook et al., 1983). This put to rest debates about whether coinsurance was penny-wise and pound-foolish. They compared fee-for-service with a prepaid group practice HMO and found the HMO cut total resource use by 28 percent and hospital use by 40 percent, with no significant negative effect on health (Manning et al., 1984). This was important in settling debates as to whether or not HMO economies could be explained as the consequence of favorable selection of patients.

Preferred provider insurance—Preferred provider insurance (PPI) was effectively outlawed in most of the United States until a coalition of business, labor, and the insurance industry defeated organized medicine in the California legislature in the summer of 1982. Subsequently, most of the larger States have also changed their laws to authorize PPI. The Health Care Financing Administration recently announced a demonstration project to test PPI for Medicare beneficiaries in five different cities (U.S. Department of Health and Human Services, 1989). If someone attempted to pass a law requiring all physicians serving Medicare patients to accept the Medicare-approved fee as payment in full, organized medicine would doubtless be able to block it. But they have not been able to block this demonstration. And it seems likely that if this experiment succeeds, it will be replicated on a much larger scale, at which point it may acquire a momentum of its own.

Of course, such demonstration and pilot projects are far from unknown in Europe. A recent paper by Kirkman-Liff and van de Ven (1989) describes more than 20 very interesting local demonstration projects in the Netherlands in the areas of monitoring and feedback of medical care utilization and costs, incentives for cost-effective care, community care (substituting home nursing for hospital), and coordination of care. The British National Health Service has attempted clinical budgeting experiments and is now doing pilot projects of indicative prescribing budgets for general medical practitioners. Launois, Majnoni d'Intignano, Stephan, and Rodwin (1985) proposed experimental réseaux de soins coordonnés, (networks of coordinated care) an idea inspired by American HMOs adapted to French circumstances. However, established interests in France were too entrenched to permit a potentially threatening idea to get a start, even as an experiment. (Of course, entrenched vested interests are not unknown in America.)

My general recommendation to Europeans would be to make more widespread and large-scale use of pilot and demonstration projects and to make less use of coercive decree, to foster a process of continuous incremental improvement rather than discrete "great leaps forward" ordered from the center. For example, in 1983, the Griffiths inquiry made a number of very sensible recommendations regarding NHS management in Britain, including competitive tendering by commercial contractors for catering, cleaning, and laundry services. The government attempted to implement this by decree, requiring all districts to submit programs and meet tight schedules. In 1985 I wrote that, ". . . it would have made far more sense to begin with a dozen pilot Districts whose managements were enthusiastic about the idea, develop and test the methods, with plenty of expert advice from private sector hospital groups, . . . from airlines and hotels that have much relevant experience, then push tendering to the maximum, display the benefits for all to see, then write the manuals and sample contracts, and develop the short training courses" (Enthoven, 1985b). In 1989, the British Government again proposes some promising and innovative ideas, such as NHS Hospital Trusts. But they announced tight timetables for implementation of ideas that have not been pretested and shown to be workable in practice (*Working for Patients*, 1989). I believe that in the long run, a phased pilot-project approach would be more effective.

Managed competition

The two best known simple conceptual models for organizing the health care economy are at opposite ends of a spectrum: the free market and the tax-supported public sector monopoly. Proponents of each like to point to the evident deficiencies of the other in support of their own preference. In fact, a free market cannot work in health insurance and health care. There are too many ways in which these

markets depart from the conditions necessary for a market to produce an efficient outcome: pervasive uncertainty, great asymmetry of information, moral hazard, adverse selection, many not-truly-voluntary transactions, etc. A free market in health insurance cannot produce either equity or efficiency (Enthoven, 1988). In the United States, for the most part, we do not have a free market in health insurance at the individual level. We have mainly collective purchases by groups, in which the elements of tax subsidy and other government regulations are important. We do have roughly 40 million or so Americans who do not get their health insurance through employment-related groups or public programs. Most of them are uninsured and must rely on public hospitals and clinics.

On the other hand, public sector monopolies have their problems, which any impartial observer will admit. They generally contain no serious incentives to improve efficiency. Indeed, they are likely to contain perverse incentives that punish efficiency (Enthoven, 1985b). They are unresponsive to consumer preferences regarding times and places and modalities of treatment. They are guided much more by provider preferences and convenience than consumer preferences. They ration by queues. They lack accountability.

So it is understandable that people are searching for intermediate possibilities, institutional arrangements that capture some of the advantages of markets without their disadvantages, arrangements that can motivate efficiency while safeguarding equity.

A desirable arrangement would separate the demand side from the supply side so that an independent demand side could present the desires of consumers and taxpayers to the providers, set standards, measure performance, and make choices. A desirable arrangement would allow the demand side to become well informed about the costs and the benefits produced by different providers. Thus it would allow the demand side to compel glasnost as described earlier.

A desirable arrangement would also allow choices at two levels: at the level of large group purchasers and at the level of individual choice. The large group purchaser would be able to bring to bear the information and expertise to evaluate all suppliers and exclude those with unacceptable performance; such a purchaser could also structure the market for individual choices so that consumers could make well-informed choices and so that consumers would be guided by correct signals to choose those suppliers that produce high-quality economical care. The element of consumer choice would make the system responsive to responsible consumer preferences regarding quality of care and service.

A desirable arrangement would thus allow the demand side some choice of supplier. It would systematically select and promote the organization and delivery of high-quality, economical, responsive care. How this goal is to be approached in any given country must reflect the cultural preferences, history,

and institutional realities of that country. Useful policy proposals must represent politically feasible incremental change. A model that makes sense in one country may have little apparent relevance to another. However, insights gained in one country's experience may be usefully adapted to another.

For the United States, I have been working out and proposing a concept I call managed competition (Enthoven, 1988). Managed competition joins two ideas. First, as previously noted, we now have in the United States a rich variety of schemes that join health care financing and delivery, schemes of varying success in organizing high-quality economical care. Each, in its way, is trying to innovate to find ways to control cost without cutting quality of care or service. Second, managed competition is based on the recognition that the market for health insurance in the United States involves three types of parties: consumers, health insurers (including prepaid group practice and other arrangements), and sponsors. The sponsors are the large group purchasers: employers and the public programs such as Medicare and Medicaid. In managed competition, the sponsor's job is to structure the marketplace, to design and actively manage a process of informed, cost-conscious consumer choice, to motivate the participating health care financing and delivery schemes to produce a favorable combination of efficiency and equity. Efficiency here means value for money as seen by informed consumers. Equity means that the sick do not have to pay much more than the well for coverage and care. Perfect efficiency and equity are of course far from possible. Thus, the sponsor should manage a process of consumer choice that rewards with more subscribers those health care financing and delivery schemes that produce better quality, less costly care, and that does not reward them for selecting good risks, segmenting the market, or doing anything that does not contribute to high-quality economical care.

We have some prototypical examples of managed competition in actual operation. There is the Federal Employees Health Benefits Program, in which more than 400 health plans of various types compete to serve about 9 million Federal employees, dependents, and retirees. This program has been in operation since 1960. In recent years, it has suffered from various correctable design deficiencies that make it vulnerable to risk selection, segmentation, and other problems (Enthoven, 1989a). In California, we have a similar system for public sector employees. And many large private sector employers offer multiple choice of health plan to employees. Richard Kronick and I have recently shown how these concepts might be generalized into a model of universal health insurance for the United States (Enthoven and Kronick, 1989).

Much of managed competition as described here is specific to the American scene, where we have multiple competing health care financing and delivery schemes and strong cultural preference for such pluralism. But some Europeans have been watching this development with interest, to see if similar ideas can be adapted to their situations.

In March 1987, the Committee on the Structure and Financing of Health Care, an advisory committee set up by the Netherlands Government, chaired by Dr. W. Dekker, published a report that proposed major changes to the Dutch health care system (Ministry of Welfare, Health and Cultural Affairs, 1988). In this proposal, market forces would be used to motivate the search for efficiency, especially through better coordination of health and social services, and flexible substitution of more effective, less costly services. In the words of the Ministry of Welfare, Health and Cultural Affairs, English summary, "Market forces provide an answer to the organizational inflexibility and cumbersome operation of the health system in the Netherlands, characterized as it is by high costs, lack of choice and lack of incentives for change." In the Dekker scheme, all citizens would become free to choose among health insurers. Insurers would be paid in two ways. First, a central fund would collect an income-related premium from all those able to pay, and it would pay insurers a risk-related premium contribution based on the characteristics of its subscribers. (This is an important sponsor function in managed competition.) Second, each insurer would charge a flat-rate premium to all insureds. Insurers would compete on this flat-rate component and would be free to negotiate selectively with providers for pay and scope of services. Insurers would no longer be obliged to contract with all providers. They could select those they considered to be efficient. And guaranteed funding for providers would be eliminated. After much public debate, the Netherlands Government indicated broad agreement with the Dekker proposals, and, in March 1988, issued a plan for their cautious and gradual implementation. This Dutch version of managed competition will give Europeans a "demonstration project" to watch much closer to home.

In January 1989, the British Government published a white paper outlining its strategy and proposals for restructuring the National Health Service (*Working for Patients*, 1989). Broadly speaking, one might characterize it as a strategy for separating the demand and supply sides of the market and for strengthening the ability of the demand side to make informed choices. In the government's strategy, District Health Authorities (DHAs), which are now monopoly suppliers of services to the people in their districts, are to be recast as purchasers of services on behalf of the populations they serve, which services are to be supplied competitively. That is, DHAs will be free to seek value for money outside their districts and even outside the NHS, in the private sector. Regions will actually receive their main budget allocations on the basis of population, adjusted for age, morbidity, and other demand-related factors, with the present adjustments for cross-boundary flows replaced by direct payments for services between regions. Regional targets have long been based on such a formula, but actual payments followed targets only gradually, because of fear of disrupting the supply side. In the new plan, district budgets will be based on estimated

need, not influenced by the services they produce.

The government's strategy includes allowing hospitals to opt out of district control and to become independent self-governing NHS Trusts. These hospitals will be free to set their own pay, contract with their own personnel, and compete to serve several districts. A key idea is that "money follows patients." Today, a hospital that does an excellent job of producing high-quality care efficiently, thereby reducing or eliminating its queue, is likely to attract more patients without correspondingly more money—a perverse disincentive. Under the new scheme, such a hospital will be able to contract with sending districts for a prompt payment per case. The government's plan also includes strengthening medical audit, and experimentation with the idea of large GP practices holding budgets for a broad range of services beyond primary care. All this is sometimes referred to as an "internal market" for health care, compatible with universal tax-supported provision of comprehensive care (Enthoven, 1985b; Owen, 1988).

The Swedish health care system seems even less amenable to concepts of managed competition than the British. And the geographic pattern of very large county hospitals seems almost a guarantee of territorial monopolies for inpatient care. However, introduction of some elements of managed competition is not beyond the realm of conceivable political reality. I have recommended a program of glasnost like the one described in this article, combined with a policy of rewarding with pay and promotion those physicians and managers who demonstrate superior performance (Enthoven, 1989b). Beyond this, it might be productive to consider competition within the public sector at the primary care level, along the lines proposed by Saltman and von Otter. Moreover, the Swedish Government instituted an arrangement whereby patients waiting for certain procedures could obtain care from other counties if the waiting time in their own county exceeded certain limits, with the patient's county paying the providing county, and the government throwing in a bonus. I understand that this appreciably reduced waiting times. What is needed is the political will for the Swedish people to create an institution independent of the health care providers, with the power to compel production of information and the resources and charter to take initiatives to get more informed choice into the system.

What these ideas and experiences illustrate is that intellectual discourse on health policy does not need to be limited to debates over the merits of polar opposites. Nor is it useful to argue abstractly over the merits of regulation versus competition. Every health care system is likely to have elements of both. The really interesting questions today are about the merits of marketlike incremental changes intended to make our systems more efficient and responsive to consumers. In this realm, American research and debate have produced what ought to be a good deal of interesting reading for Europeans.

Acknowledgments

This research was supported by a grant from the Henry J. Kaiser Family Foundation. The author also gratefully acknowledges comments and suggestions from Bradford Kirkman-Liff, Victor Rodwin, and Peter Van Etten.

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Respondents:

Jeremy W. Hurst

Introduction

It is particularly appropriate for a British health economist to be asked to comment on Enthoven's article "What can Europeans learn from Americans?" The British Government has just undertaken "the most far reaching reform of the National Health Service in its forty year history" (*Working for Patients*, 1989). The government's announcement was preceded by an unprecedented public debate about the future of the National Health Service (NHS) (Brazier, Hutton, and Jeavons, 1988; Goldsmith and Willetts, 1988; The Institute of Health Services Management, 1988; King's Fund Institute, 1988; Robinson, 1988). This debate made frequent references, both positive and negative, to the U.S. experience. More specifically, several commentators put forward ideas based on Enthoven's "Reflections on the Management of the National Health Service" (Enthoven, 1985), and some have suggested that, in key respects, the government's final proposals bear a striking resemblance to his suggestions.

I wish I could write as confidently about the situation in other European countries, but, as Enthoven has indicated, their health care delivery arrangements are very diverse. Several countries have recently undertaken or are considering reforms, but my knowledge does not extend to the lessons they have learned, if any, from the United States. Accordingly, my remaining remarks tend to be dominated by a British perspective.

Growth of health expenditure

Enthoven begins his article by conceding some shortcomings in the American health care system.

The opinions expressed in this article are those of the author and do not necessarily represent the views of the Department of Health in England.

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Here he illustrates neatly the rule that Americans are usually more authoritatively critical of institutions in the United States than are foreigners. However, it is true that Europeans tend to feel superior about their universal health insurance coverage, and they look with mixed feelings at the growth rate of American health expenditures.

I was a little surprised that Enthoven did not bring us more news on cost containment. There is much interest in European countries, with their predominantly public sources of finance, in the growth rate of total health expenditures. This is especially so in those countries with relatively open-ended social insurance systems, such as the Federal Republic of Germany, France, and Belgium. They, presumably, would be curious to know what, if anything, has been learned in the United States from the long debate about competition and regulation. To what extent have the new developments, such as payment based on diagnosis-related groups (DRGs), health maintenance organizations (HMOs), and utilization reviews, influenced total health expenditures? Is there still optimism that competition will secure cost containment?

In countries such as Britain and Sweden, where governments, central or local, have taken upon themselves the awesome responsibility of setting the overall level of most health expenditures, there are invariably painful debates about the right level of health spending and considerable uncertainty about the criteria for reaching decisions. In this connection, I found Enthoven's summary of findings from the literature on appropriateness particularly thought provoking. What is missing from public decisions on the level of health expenditures is some measure—however partial—of the marginal health outcome per increment of spending. The new work in the United States on appropriateness and outcome offers a glimpse of how we might establish a relationship between outcome and expenditure, at least for certain programs.

Glasnost

Enthoven devotes the bulk of the first half of his article to an informative and stimulating report on certain recent developments in management information in U.S. medical care under the general

heading of "glasnost." In my own research (Hurst, 1985), I have been struck by the general similarity (if not the equal accessibility) of management information in the United States and the United Kingdom, putting aside payment methods. Thus, picking up four of Enthoven's recommendations, the United Kingdom has had uniform hospital discharge reports and a uniform national system of hospital cost accounting since soon after the formation of the NHS. The latter now provides specialty costs but not yet DRGs for inpatients.

England has had a long-standing trial of comprehensive longitudinal patient records in the Oxford Region. There have been regular national polls of patient satisfaction with the NHS (Davies, 1989), and there has been an ongoing, high-quality debate about the achievements and failings of the NHS and private medicine in some British newspapers. I could go on: The United States and the United Kingdom have similar health and vital statistics, similar household surveys, and similar data on health expenditures and manpower. True, I have only examined data collected nationally in the United States, but I assume that the superstructure gives important clues to the foundations.

On the other hand, there is, so far, a desperate lack of health outcome and quality data in both countries. This leaves consumers (and governments) short of information with which to make rational choices. What is now being confirmed, from studies of medical practice variations, is that doctors themselves are often uncertain about the indications for and effectiveness of treatments. It is sometimes said that there is a major asymmetry of information on the two sides of health care markets (consumers and providers). On some occasions, it looks more like a symmetry of uncertainty.

Meanwhile, European countries often look to the United States for advances in management information. Several have already started their own work on DRGs and on variations in medical practice. In Britain, experts have also done a good bit of work on some other imports from the United States, especially avoidable mortality (Charlton et al., 1986) and the idea and practice of quality-adjusted life years (Williams, 1985). The latter has helped to focus (and sometimes to inflame) some debates about the allocation of resources; the former is now used as a performance indicator for the NHS (*The Government's Expenditure Plans*, 1989).

The recent review of the NHS has underlined the importance of the measurement of health outcome, clinical audit, and achievement of consumer satisfaction. Hence, I would expect the Department of Health (in England) to look carefully at risk-adjusted measures of outcomes, outcomes management, utilization review and peer review organizations, and the development of service and access standards. I would add to this list the important American work on appropriateness and risk-adjusted capitation payments.

A major concern about such advances, however, is what they will cost. Enthoven does not attach price tags to his proposals. It has been estimated that America already devotes about 22 percent of its health expenditures to administration (Himmelstein and Woolhandler, 1986). It is sobering to learn that the available management information is nevertheless not enough. The same authors estimate that the share of British health expenditure devoted to administration is about 6 percent. There is an expectation in some quarters that this figure will rise, because the reforms call for, and will demand, better management information. Nevertheless, the whole exercise will, as usual, be governed by a tight budget. It would have been nice to know which bits of glasnost, if any, have been shown to represent particularly good value for the money in the United States.

This leads me to a final point about management information. There seems to be a certain tension between the two parts of Enthoven's article—in particular, between his plea for uniformity and centralization (of information systems) in the first part and his plea for diversity and decentralization (of organizational structures) in the second part. Is it that the production of information is to some extent a public good and that, therefore, we cannot rely on the market to produce the optimum quantity? Will perestroika fail to produce glasnost? Later in his article, Enthoven argues that a desirable arrangement would allow large group buyers of health care to become well informed about performance and to compel glasnost. But would large group buyers necessarily have either the incentive or the power to do this adequately? Is this one area in which there is an inescapable role for government?

Perestroika

In the second half of his article, Enthoven recommends that Europeans think seriously about decentralization, the accommodation of more diverse preferences, and the creation of a climate more tolerant of experimentation. He suggests that we steer between the extremes of the free market and the tax-supported public sector monopoly. He recommends managed competition, which would involve a separation of the demand side of health markets from the supply side and would offer two levels of choice: choices by individuals among large group purchasers and choices by large group purchasers among providers. Such arrangements could "... motivate efficiency while safeguarding equity."

The recent reforms in Britain seem to follow some of these prescriptions. From 1948 to date, the NHS has provided medical care to all, when needed, mainly free of charge to the patients. It has been funded out of general taxation. There has been only a small, but growing, private sector. Primary care has been supplied by independent general practitioners (GPs), remunerated partly by capitation fees and under contract with the NHS. Individuals have been able to choose their GP and about 75 percent of episodes of

medical care have started and finished with the GP. Hospital care has been supplied by public hospitals managed by District Health Authorities (DHAs), funded by block grants from central government. Apart from emergencies, access to specialist doctors and to hospitals has been through the GP gatekeeper.

The reforms retain tax funding, and services will continue to be available to all patients mainly free of charge. But, as Enthoven has reported, the reforms introduce a new separation of the demand side from the supply side for hospital services within the NHS.

On the demand side, there will be two levels of choice: level 1, where the existing arrangements for individuals to choose their GP will be strengthened; and level 2, where DHAs will now become mainly buyers of hospital services, able to contract with both local and more distant hospitals, public and private, for services to their resident populations. In addition, large GP practices can volunteer to have transferred to them part of the DHA's hospital budget, thereby allowing them for the first time to back up with cash their referrals for patients to hospitals.

On the supply side, public and private hospitals will be encouraged to compete for the business of both DHAs and those GP practices holding hospital-referral budgets. In addition, well-managed public hospitals will be able to volunteer for self-governing status within the public sector.

Such arrangements should offer an opportunity to increase efficiency without reducing equity. Moreover, taken together with those features of the NHS that have been retained, they seem to qualify for the title of "managed competition."

Despite the parallels with American thinking here, it is not clear that Europeans have as many lessons to learn from the United States about perestroika as they do about glasnost. One difficulty is that it is hard to draw conclusions when institutions are quite different on either side of the Atlantic. Another difficulty, of which Enthoven warns us, is that America is still wrestling with the appropriate mix of management and competition in her own health markets. It would have been nice to know more about whether the "... prototypical examples of managed competition in actual operation" in the United States (from Enthoven's article) have provided answers to the sort of questions that tend to be posed about managed competition, such as:

- How can information and administration costs be prevented from eating into the savings that result from effective competition among providers?
- How can cost-conscious competition avoid focusing on cost at the expense of quality, when cost is more easily measured than quality?
- To what extent can adverse selection be dealt with by using either risk-related capitation payments or regulations, when there is consumer choice among providers?
- How can the right balance be struck between consumer choice and agency choice in health care?

On the last of these topics, it is interesting to read in Enthoven's article that in California patients have

not fled poorly performing hospitals (in terms of mortality), despite negative publicity. Can we take it that Californians are more concerned about the convenience of hospital care than about its clinical quality, or have these patients been poorly advised by their agents? What is the appropriate scope for consumer choice and agency choice, respectively, in hospital care?

Convergence

One of the most striking facts about the financing and organization of medical care is the extent to which it varies among developed countries. With the arrival of ideas that amount to managed competition in several countries simultaneously, may we now expect some convergence?

I think it is premature to talk about convergence. One of the features of managed competition is that it seems to be capable of coexisting with some very different financing regimes—with private insurance in the United States, with social insurance in the Netherlands, and with tax-funded global budgets in the United Kingdom. Countries with private and social insurance will no doubt look to managed competition to deliver overall cost containment, among other things. Britain will ask less of it. There is no sign that Britain will abandon its reliance on tax-funded global budgets: They seem to be the surest way of limiting the burden of health care on the taxpayer while such care continues to be available to all mainly free of charge to the patients. Also, managed competition is capable of coexisting with some major differences in organizational arrangements, ranging from specialty doctors with hospital admitting privileges and mainly private hospitals in the United States, to strong primary care, the GP gatekeeper, and mainly public hospitals in the United Kingdom.

So, I believe that diversity will continue. Nevertheless, it is clear from this exchange that Europeans and Americans still have a lot to learn from each other as we continue to pursue our somewhat separate ways.

Acknowledgments

I am grateful to Andrew Burchell, Mike Parsonage, Jean-Pierre Poullier, and Clive Smee for comments on the first draft of this article.

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Björn Lindgren

Introduction

As Enthoven emphasizes in the introduction to his article, there is not one single European health care system, but many. The ways in which health care is financed, organized, managed, and delivered vary probably even more within and among the countries of Europe than in the United States, with its great variety of health care institutions. The relevance of the advice and suggestions given in Enthoven's article thus depends very much from which country's perspective they are seen.

These circumstances call for some caution on my part. I do not know enough about every country in Europe to be able to speak for all of them. I must be more modest and limit my comments to the experience of a country I know fairly well—Sweden.

Thus, the first question to be asked and answered in response to Enthoven's suggestions is whether the Swedes need his advice or not. I am personally totally convinced that we do; otherwise, I would not have invited him to Sweden to critically review the Swedish health care system (Enthoven, 1989). For the readers of this journal, however, the need for advice may not be so obvious. Let me, therefore, begin this response with a brief description of the Swedish health care system: structure, relation to the overall economy, variations in efficiency, and lack of consumer choice. The second issue concerns the practicality of reforms in Swedish health care. I do share Enthoven's pragmatic view: "The really interesting questions are how to identify and design politically feasible incremental changes that have a reasonably good chance of making things better." Thus, I discuss Enthoven's proposals from these perspectives.

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The Swedish health care system

Structure

A characteristic feature of the Swedish health care system is the dominant role played by the county councils. The 26 county councils (including some independent larger cities) are by law responsible for health care delivery within their geographical boundaries. They are also empowered to impose a proportional income tax on their residents. Moreover, health care is practically the county council's sole responsibility; health care accounts for 85-90 percent of the operating costs of a county. Inpatient care is almost completely financed through county-council taxes and delivered by hospitals owned by the county councils.

During the last 25 years, the role of the county councils has actually been strengthened. Mental hospitals used to be a central government responsibility but were transferred to the county councils in 1963. Another important change occurred in 1970, when the ability of hospital physicians to have private outpatients treated at county council facilities was abolished. Since 1980, public vaccination programs are no longer the responsibility of central government but of each county council. Also, the two university hospitals still owned by the State at the time (the Karolinska Hospital of Stockholm and the Academic Hospital of Uppsala) changed from State to county council ownership in 1982 and 1983, respectively. Furthermore, the Swedish Health Care Act of 1982, revised in 1985, places the prime responsibility for all health care planning on the county councils. This responsibility implies, for instance, that the county councils have the authority to negotiate the establishment of a new private practice and the maximum number of patients that the private practitioner will be allowed to see per year. Without an agreement with the appropriate county council, visits to private physicians are not reimbursed from social insurance. Thus, the county councils also

regulate and, to a high degree, control the market for private health care.

Each county has at least 1 central general hospital, with more than 1,000 beds and between 15 and 20 specialties, as well as several minor district hospitals. There are also nine regional hospitals in Sweden. These are affiliated with medical schools and serve as centers for research and teaching. A regional hospital provides specialized services such as neurology, neurosurgery, dermatology, thoracic surgery, plastic surgery, radiotherapy, urology, and pediatric surgery. It serves residents of several counties, so there are cooperative agreements among the counties on provision and financing of these highly specialized services.

Two additional things should be noted. First, in addition to its duties to serve the whole region with specialized services, the regional hospital also functions as a district hospital or a central general hospital for those people who live in the town or city where the hospital is situated. Second, all hospitals in Sweden have large outpatient departments; in fact, about 40 percent of the 27 million yearly visits to physicians in Sweden take place at hospitals. Besides, to a large extent, patients are allowed to make appointments with the hospital outpatient departments even without having a referral from a general practitioner. This is also true of regional or university hospitals. Hospital-based inpatient and outpatient care accounts for more than 70 percent of total health care costs in Sweden.

Most health care in Sweden is provided by the public sector, i.e., by the county councils; 97 percent of hospital admissions, for instance, are public. About 20 percent of all physicians (one-third of these in occupational health) and 50 percent of all dentists are privately employed; their incomes normally depend on how many patients they see. Publicly employed physicians and dentists are all salaried. The pharmacies were privately owned until 1971, when they became nationalized and organized as one national corporation. More than 60 percent of all pharmaceuticals are imported. The Swedish pharmaceutical industry is private with one exception, Kabi, which was nationalized in the late 1960s. Medical schools are financed and administered by central government.

Direct consumer charges for health care are only nominal; for visits to the public health care facility, for prescribed medicines, and for visits to private doctors associated with the social insurance plan, the charges are less than the price of a man's haircut. In total, consumers' out-of-pocket expenses account for 9.5 percent of total health care expenditures. The proportional county council personal income tax rate has increased from an average of 8 percent in 1970 to 13.5 percent in 1985. County council taxes finance 65 percent and central government 6.5 percent (through subsidies to county councils) of the total health care bill. The remaining part is paid for by social insurance: 8.5 percent of the total bill is for privately provided medical and dental care and

prescribed medicines, and 10.5 percent is for publicly provided health care.

The health insurance part of social insurance is mainly a sickness cash-benefit system; sickness cash-benefit payments account for about 65 percent of the total social health insurance expenditures. However, social insurance pays a nominal charge per bed-day to hospitals but contributes more substantially for prescribed medicines and private or public outpatient health care. Swedish social insurance is a centralized system; central government is the supreme decisionmaker. Social health insurance is financed mainly by a proportional payroll tax; some transfer payments from central government (15 percent of the total expenditure for social health insurance) are also involved. The social insurance plan covers all Swedish citizens as well as foreigners residing in Sweden. Residents are automatically insured; and, in general, the insurance is compulsory.

Relation to the overall economy

Health care represents the largest subsector within the public sector and, apart from the social sector, it is also the fastest growing. In 1985, expenditures for health care were nearly 75 billion Swedish Krona (SKr), or SKr 9,000 per inhabitant. Additional expenditures associated with sickness and disability are also significant; sickness cash benefits totalled SKr 18 billion, and early retirement pensions SKr 15 billion in 1985, i.e., SKr 3,940 per inhabitant (National Swedish Social Insurance Board, 1987). As a percentage of gross national product (GNP) in current prices, health care consumption appears to have stabilized at a level just below 9 percent.

Whereas health care consumption reached a constant share of GNP in nominal terms in the 1980s, the development looks somewhat different in real terms. Real health care consumption increased at an annual rate of 2.2 percent from 1980 to 1985, compared with 1.8 percent for real GNP, hence, increasing its share of real GNP. Thus, in real terms, health services not only used more resources but also a greater share of all resources. The tendency, however, was not as pronounced as it was during the last half of the 1970s, when annual real health care consumption increased three times faster than did real GNP.

The impression of a large and expanding sector is strengthened by a look at labor statistics. Employment in the health care sector increased rapidly during the 1980s; annual increases averaged 2.4 percent, for both persons employed and hours worked. Granted, this is less than it was during the 1970s, when the annual increase averaged 5.6 and 3.6 percent, respectively. Nevertheless, employment in health care increased much more rapidly than did employment generally in Sweden, raising its share of total employment from 9.9 percent of all hours worked in 1980 to 11.1 percent in 1985.

The explanation for the divergent trends in health care consumption in nominal and real terms,

respectively, is obviously to be found in the development of prices. Before 1980, salaries for health care staff increased as rapidly as they did for other groups in Sweden. Between 1980 and 1985, salaries rose only 6 percent per year, on average, compared with 9 percent for the rest of the economy. It is clear, however, that the labor markets for health care personnel were not in equilibrium, so future increases in payments would be expected (Lindgren, 1989b).

Variations in efficiency

Despite the absence of a relevant and consistent management information and control system, which Enthoven emphasizes in his article, some data and statistics are produced regularly or on an ad hoc basis. A number of comparative studies have been made, and these indicate significant differences among hospitals and hospital departments concerning the costs for comparable output, productivity, production technique, and quality. Of course, inefficiency is not the sole explanation of observed variations, but in most studies, the differences are significant enough to reveal an efficiency problem.

Thus, Eckerlund, inspired by the works of Wennberg (1984), studied variations in practice at departments of gynecology (Eckerlund and Gårdmark, 1986) and dermatology (Eckerlund and Swanbeck, 1987). In gynecology departments, the average length of stay in the maternity ward varied between 4.4 and 8.2 days, averaging 6.5 days. The rate of cesarean section varied from 7.5 percent to 19.2 percent of all deliveries. A comparison of dermatology departments in Sweden found that the number of dermatology beds varied between 2.5 and 11.3 per 100,000 inhabitants in a catchment area. Lindgren and Roos (1985) found significant differences in the development of productivity among Swedish hospitals from 1960 to 1980, ranging from -9 percent to +3 percent change in productivity per year. There was no evidence that hospitals with low costs and a rapid increase in productivity neglected the quality of services.

Lack of consumer choice

There are considerable deficiencies in consumer choice in Swedish health care. The opportunities for a Swedish citizen to influence his or her own situation and the general development of society have been studied by one of the research projects associated with the 1985 government committee on power and democracy in Sweden (Petersson, Westholm, and Blomberg, 1989). The analysis was based on more than 2,000 interviews in which persons 16-80 years of age were asked about the degree of influence they had over their own situations in six essential dimensions: housing, consumer, patient, parents with small children, parents with school-aged children, and employee. Of the six areas investigated, health care showed the greatest tendency toward "silent

powerlessness"; widespread dissatisfaction existed but was relatively seldom expressed by independent action. For example, patients and families felt they had little opportunity to choose their physician or to change to another hospital department or primary health care center. This attitude contrasted sharply with the area that ranked highest in terms of consumer influence, i.e., the role of the consumer.

Furthermore, Otter, Saltman, and Joelsson (1989) asked each of the 26 county council health service managers in Sweden about their patients' opportunities to choose a primary health care center or physician within the county council's domain. The responses showed a wide gap between patients' hypothetical and actual opportunities for free choice. Free choice seemed to be regarded as something difficult, something that creates administrative problems, and that therefore should be permitted only as a last resort after a patient has lost all confidence in the physician assigned to him or her.

Enthoven's proposals

Enthoven's advice is separated into two parts: one concerned with management information, evaluation, and control; the other with changes in the financing and organization of health care that might be considered in the European countries. Enthoven presents a detailed argument for developing advanced management information systems and explains in detail the role market incentives might play in improving the efficient provision of health care, often with direct reference to Sweden. Therefore, I shall not repeat all the arguments here. In principle, the arguments are no different in Sweden than anywhere else. Furthermore, it would add little, because I fully agree with Enthoven that the Swedes should have much to learn from the American experience, not least from "best practice" as he presents it. So, instead, I try to concentrate most of my discussion of Enthoven's proposals on what is actually happening in the Swedish health care system and on the political feasibility of introducing "glasnost" and "perestroika."

Management information, evaluation, and control

Information by which performance can be measured should, naturally, be as important to the public health care sector as it is to private industry, a necessary internal management instrument on which to base incentives for efficiency. Normally, consumers do not concern themselves with how private firms measure their performance or how they provide quality assurance for their products. This is up to the individual firm. The market test of survival serves the purpose of external control. Only the efficient producers will, in the long run, find consumers willing to buy their products at prices that cover their costs of production. Inefficient companies will run at a loss

and, if things do not change, they will have to close and leave the market.

For activities within the public sector, there is a second purpose for information on performance in terms of productivity, efficiency, and quality. Because the monopolistic public health care sector does not have to face competition in the market and, hence, cannot go bankrupt, there is a need for detailed information for decisionmakers and taxpayers to ensure the greatest health care value for the money spent. In place of the market test, comparisons of costs, productivity, and quality become important. The information is then no longer just a private affair, but a social concern. As such, a large amount of openness is required.

Enthoven presents an 11-point program for management information, evaluation, and control. The core of the information system consists of uniform hospital discharge data reports and a national uniform hospital cost accounting system, which could be linked to each other via the use of DRGs, diagnosis-related groups. For long-term care and ambulatory care, similar-in-purpose systems are not yet available, but are presently being developed in the United States. Based on the information produced, a number of examples of possible ways to compare productivity and quality and to set standards for service and access are given by Enthoven.

I doubt that there is much controversy in Sweden, at least in principle, about the possible usefulness of this kind of information and evaluation studies. Studies of medical practice variations are performed from time to time; there are a few regional and national registries of longitudinal patient records for some surgical and orthopedic surgical procedures; there are quality assurance study groups in some hospitals; DRGs are being adapted to Swedish conditions; and comparisons of costs per case and so on are being done now and then.

These studies reveal a spontaneous curiosity and a natural interest among some physicians and administrators to evaluate their own work. Yet there are no regular evaluations, no consensus as to how to do the evaluations, and still very little public openness about the results. And the studies are made difficult by the fact that Swedish health care lacks the uniform cost-accounting system necessary to compare costs for patients, treatments, hospitals, and hospital departments. Nor is there a good working system for reporting on patients according to diagnosis, treatment, health status, etc., which could be interfaced with a cost-accounting system. True, providers are obligated to report patient information to the Swedish National Board of Health and Welfare, but there is little incentive for accurate reporting, hence, these reports contain errors of importance for planning (Berglund, Cederlöf, and Höglund, 1985; Nilsson, 1988). It is also true that the Federation of County Councils has issued guidelines for the cost-accounting systems to be used by the county councils. These recommendations, however,

give wide latitude for different interpretations, which make direct comparisons difficult.

To produce good data, data collection and processing must appear meaningful to those who do the job. As Enthoven emphasizes, mandatory reporting to national data bases will never be successful, if the local hospital or hospital department does not have incentives to use the information in the first place, or if it does not get any useful feedback from the national central agency. Within the context of the present Swedish health care system, however, I would guess that one must think more about positive incentives to do it right than about penalties for not doing it. The strong independence of tax-raising county councils makes them less sensitive to the nonpayment of central government subsidies, which Enthoven suggests in order to ensure accurate and timely reports.

There must be created a self-interest for hospitals and hospital departments to report information properly and promptly. A majority of physicians, other health care personnel, and administrators—or, because of their key role in Sweden, the relevant trade unions—should therefore be persuaded to accept that promotion possibilities and pay should be related to performance in terms of productivity, efficiency, and quality. To evaluate performance properly is not possible without a fairly large sample of hospitals with which to make comparisons. This would require uniform national reporting systems. Some system of independent auditing would also be needed.

The central government in Sweden seems to be aware of the need for better management information and for evaluative studies. In May 1988, a government committee was established to propose a uniform (national and county council) health care information system that meets the basic informational needs for different levels of planning, management, monitoring, and assessment. However, despite the fact that information will be collected and used only if it appears meaningful for the decisions to be made at the local level, the committee (which is still working) is not supposed to deal with the issues of proper incentives.

It is quite obvious from Enthoven's article that it is certainly not impossible to create systems for information, evaluation, and control that better utilize existing knowledge, experience, and initiatives. The internal systems of information, evaluation, and control, however, reflect conditions in the external environment—the way in which health care is financed and organized. Thus, internal reforms would be facilitated, or rather, made necessary, by changing the external conditions. If sensible changes in financing and organization could be introduced, and if the survival and success of providers were to depend on how well they met the requirements formulated by consumers, then there would also be a good chance that the internal management and control structure would adapt and develop accordingly.

Financing and organization options

I strongly sympathize with Enthoven's view that "the really interesting questions today are about the merits of marketlike incremental changes intended to make our systems more efficient and responsive to consumers." So, what changes in finance and organization could be made? Could consumer choice and provider competition be introduced in Sweden to improve efficiency, while at the same time satisfying equity considerations to a degree not less than today? In principle, the answer is yes, and I do believe that there are important lessons to be learned from the American experience and from the ideas presented by Enthoven. Moreover, Swedish economists have shown how the concepts of prepaid group practices, health maintenance organizations, and managed competition might be used in the Swedish context (Blomqvist, 1980; Jönsson and Rehnberg, 1986; Lindgren, 1989a; Ståhl, 1979 and 1983; and Svalander, 1982).

Consumer choice and influence could certainly be increased within the framework of the present organization. Without shaking the system down to its foundations, patients might very well be allowed to freely choose a primary care center, physician, and hospital to a much greater extent than what, according to present studies, is currently the case. Patients could also be given more opportunity to feel that they can influence decisions and to speak up concerning conditions that they believe are not satisfactory. This would be particularly effective if they could be supported, as Enthoven suggests, by strong independent organizations—sponsors—with a consumer point of view (Enthoven, 1988).

The opportunity to choose is important per se to consumers and, hence, is a source of well-being. However, in order to result in more than marginal improvements in efficiency, consumer choices must have an influence on the revenues or budgets of the health care providers. This would then create competition among individual health care providers, who might look for ways of acquiring patients by delivering high-quality care at lower cost.

Competition can never work if the roles of the consumer and provider are not separated. This is definitely true in health care. In Sweden, however, the county councils are by law the main providers of health care, while at the same time, they have constitutional rights to tax their citizens. Thereby, the county councils finance their own production, while at the same time, elected county politicians are expected to represent the interests of their consumers or voters. Potential and actual conflicts between consumer and provider interests are innumerable, and there is a tendency for the provider interests to dominate. The county council is the sponsor, insurance organization, and provider—all in one.

Technically, it would be quite possible to create a system in which the three roles of the county councils would be separated. The most natural role for the county councils would be that of sponsor. As before, the county councils could have the right to tax their

citizens, and insurance for all citizens could be mandatory. But rather than having only one provider, the county councils should offer their citizens a selection of different arrangements. No health care institution would remain under county council ownership. Hospitals and other health care institutions could instead be owned by insurance companies, consortia of private companies, not-for-profit trusts, or companies owned by the central government. These arrangements could be so designed that they stimulate cost-conscious consumer choices. Then consumers would be motivated to try to obtain the best buy for their money.

There may be several reasons why proposals on changes in the organization and financing of health care have not gone very far from mere academic discussion in Sweden. First, the existing system enjoys, despite all, a certain advantage in public opinion. There is always a resistance to change in the health care system. Not only politicians but also voters are highly risk-averse. Second, except for dental care, health care in Sweden is a public monopoly; over the years, more and more power has been concentrated in the county councils. Third, many people in Sweden are opposed to competition for strictly ideological reasons, especially competition in health care. Fourth, legislation today gives the county councils and their elected officials direct responsibility for providing health care; the county councils are supposed to not only finance health care but also run the hospitals. Existing legislation is thus an obstacle, and new laws would be needed. However, in overhauling the legislation, it would be important to also make an investigation into what, for instance, the optimal sponsor would look like. There are several alternatives that seem natural to investigate. One would be to let the local communities be the sponsors. Another alternative would be to let health care finance be incorporated within the same central government system as social insurance.

There are certainly many lessons to be learned by Europeans from Americans about the financing and organization of health care. But I wonder whether the best lesson to be learned, especially for the Swedes, might be the willingness of Americans to experiment and to set up demonstration projects. The number of projects mentioned by Enthoven is impressive. I personally do not believe that it is possible to choose one optimal approach based solely on a priori reasoning and available empirical evidence. Thus, if we Swedes are not totally convinced that we have found the best organizational solution for supplying ourselves with the health services we want—and much indicates that we are no longer as convinced as we were—then we must allow ourselves to experiment in order to explore alternatives to the present organization. Because the present system is a rigid public system, market incentives seem natural candidates to be tried. The evidence from carefully evaluated experiments could be used to make more global decisions about how to provide health care most effectively.

Closing remarks

I am sure that Europeans have much to learn from Americans, not least from what seems to be best practice in the health care business. There is no doubt about that. However, every society has its own social, cultural, economic, and political goals and traditions. The relevance of the American experience is then very dependent on from what country's perspective it is seen; how health care is presently financed and organized in that country; and the kind of political environment in which health care must work.

Swedish economists have shown a great interest in adapting and transforming the best American experience and ideas into suggestions as to how Swedish health care might change its financing and organization to improve consumer choice, introduce provider competition, and increase efficiency. The discussion of alternatives has not reached far beyond academia, and the economists' arguments have mostly been met with political counterarguments based on worst American experience. The need for better information should, however, be self-evident in a country in which all official documents, including the Health Care Act, emphasize the need for planning in health care. Naturally, the Swedes could afford to spend some share of their huge health care bill to create one of the best health care information systems in the world. It is really not a question of resources, but a matter of political will.

For other countries in Europe, a minimum of necessary information may seem to be enough, taking into account the limited resources available for health care. To yet other countries, i.e., countries such as Belgium, the Netherlands, and the Federal Republic of Germany, with long traditions of strong independent institutions, marketlike incremental changes should look more tempting. Come 1992, all member states of the European Economic Community (EEC) will probably be much more oriented toward consumer choice and provider competition in the financing and organization of health care.

1992 will be important for the Swedes, too, even if Sweden were to continue to stay outside the EEC. The member states may be able to provide the Swedes with good examples of how more competition could be introduced in health care, without completely destroying the foundations on which the welfare state has been built. A number of good examples close to home might more than balance the bad experiences of the United States in the political debate. Consumers-voters-taxpayers might then acquire the experience and information necessary to demand the changes that will be required.

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Robert G. Evans and Morris L. Barer

The American predicament

Enthoven takes on a formidable challenge. Rehearsing the stylized facts of the American health care system—an immodest system with much to be modest about—his summary is blunt. “. . . [I]t would be, quite frankly, ridiculous . . . to suggest that we have achieved a satisfactory system that our European friends would be wise to emulate.” Agreed. A more plausible proposition might be that most European countries have achieved a reasonably satisfactory system of health care funding and delivery, any one of which the United States would be wise to emulate. If only they could.

The long-standing American problems of cost escalation and grossly inequitable coverage are well known and widely deplored. But Enthoven emphasizes an additional point often obscured in the partisan rhetoric. Many Americans comfort themselves with the belief that, even if their system is by far the most costly and least equitable of any in the industrialized democracies, at least it provides “the world’s best care” for those who can afford it. But if “best” is defined in terms of outcomes achieved, rather than as a simple linear function of cost, then the evidence suggests that even this is wishful thinking. “More” is not the same as “better.” What America provides is not the world’s best, but the world’s most, and most highly priced. (Providers of health care, in the United States and out of it, assiduously promote the illusion that the quality of health care is a simple linear function of expenditure, with a significant (positive) slope coefficient. This relationship certainly holds for provider incomes, which are in total identically equal to health expenditures; the activity and outcome data are rather more refractory.)

This is an important lesson for all of us. For the past decade, most western European countries have limited the expansion of their health care systems to a roughly constant share of (growing) national incomes (Schieber and Poullier, 1988). Providers, habituated to the rapidly rising shares of earlier years, have grown increasingly restive over these “cutbacks,” and their ambitions press ever more strongly upon the restraints imposed by payers. Everywhere they seek “just a bit more” (than everyone else), to do ever more good, and allege growing threats to the health of patients if their claims are denied. But only in America have providers succeeded in commanding an ever-growing share of national economic resources. Hence, the importance of Enthoven’s point: Americans are not better served, or healthier, as a result.

But are they nevertheless more satisfied with their

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system? After a decade of growing divergence between the United States and Europe (Abel-Smith, 1985), a poll of individual Americans has found a substantial majority who say they would like to trade their system for someone else’s—specifically that of Canada (Blendon, 1989). This extraordinary finding suggests that a majority of the American public shares the assessment of external observers and of Enthoven.

Necessity—the mother of invention

Yet in spite, or more probably because, of its overall difficulties, the United States appears to be far and away the most fertile field of major institutional innovation in health care delivery and finance. Its experience presents, Enthoven suggests, many examples of the good as well as the bad and the ugly. He offers a selection of promising American innovations from which others might “. . . identify and design politically feasible incremental changes . . . that have a reasonably good chance of making things better.”

His category labels for these innovations—glasnost and perestroika—are both eye-catching and functional. Unexpected and foreign, they emphasize the system independence of the issues involved. But the categories themselves are very old and very familiar—information and incentives. The behavior of individuals and organizations is determined by what they (think they) know about their environments and capabilities and how (they believe) their behavior will further their objectives. To modify a system, one must change the information held by and/or the incentives bearing on the actors in that system. At this level of generality, it makes no difference whether one is contemplating the economy of the U.S.S.R., the health care system of the United States, or a private corporation such as Exxon or Philips.

Glasnost: More information for whom?

But who are the critical actors for whom better information is to be provided? Proposals such as uniform discharge abstracts and cost accounting, or patient coding by diagnosis-related groups (DRGs), are improvements in MIS, management information systems. They presuppose a health care system with a well-defined management structure, whose managers are to be enabled and encouraged to achieve the best possible health outcomes for the resources that the rest of society hands over to them—or rather, through them to the providers of care. American employers, health maintenance organizations (HMOs), and insurers, Canadian provincial governments, German Krankenkassen, and British District Health Authorities are all, in different ways, financially at risk for the behavior of their health care systems and need much better information than they now have to ensure that they are getting value for money. Enthoven suggests that the United States is farther

ahead in developing appropriate information systems, and, on balance, we believe he is right.

On the other hand, publication of outcome information, and the development of risk-adjusted measures of outcomes (RAMOs), peer review organizations (PROs), and standard-setting processes that will generate the publishable information, presuppose a much more powerful role for the individual citizen, either as actual or potential patient, or as voter, employee, and tax or premium payer. In Enthoven's proposals for the United States, individual choice and system management are subtly interlocked (Enthoven and Kronick, 1989a and 1989b). The choices (and political pressures) of better informed individuals create incentives to keep the system managers up to scratch, while the improved MIS not only provides the latter with the necessary tools but becomes the source of improved information for the former.

The glasnost strategies thus address two distinct audiences, through a combination of MIS and public information, though the two are powerfully linked and interdependent in a way that represents an important lesson for both the United States and Europe. Better management may require better management data, but from whence arises the demand for better management?

Who wants to know?

This interconnection requires emphasis, because comparative system performance suggests that MIS improvements—more, better, and especially more timely data—have heretofore been neither necessary nor sufficient for better results. They were not necessary, as indicated by Enthoven's argument that European systems are significantly better than that of the United States, despite a management information base that no private firm would or could tolerate for 20 minutes. And they have not been sufficient, because, in fact, many of the MIS-type innovations that Enthoven describes (uniform discharge abstracts and accounting systems, comprehensive population-based utilization data) have been in place, or within easy reach, in the Canadian provinces for roughly 20 years. As an MIS, the Canadian health care data bases have a number of inadequacies. But the key point is that, for roughly two decades, the provincial agencies that generate these administrative data have not judged it worthwhile to improve them. The constraints have not been technical ones. Yet critiques of the Canadian health care system have consistently emphasized that, despite its important advantages, it is seriously undermanaged and displays substantial room for improved performance (e.g., Rachlis and Kushner, 1989).

Better tools for management do not themselves lead to better management. In Canada, the payers for care (provincial governments) have not had the political legitimacy or will to engage in the more detailed, microlevel system management that such better data would make possible. The extraordinarily

underdeveloped state of European data bases may reflect similar inhibitions felt by governments and social insurance agencies (Evans, 1989). After all, it is hard to believe that, over a time span of decades, Europeans have simply not noticed that their information base was somewhat scanty.

Who is in charge here?

At present, in Europe, Canada, and, to a large extent, still in the United States, the providers of health care, particularly physicians, regard themselves as the only legitimate managers. If "there [are] well-established scientifically based standards for medical practice" that form part of professional training, then obviously only professionals are competent to interpret and apply those standards, to decide what shall be done, to whom, and by whom. Insurers and governments are there to pay the bill, not to direct the performance. What Enthoven (and we) would regard as more cost-effective management, most providers would—do—regard as wholly unwarranted and inappropriate lay interference with professional autonomy.

Not only do professionals believe this, it is even more important that most of the general public agree. The illusion of physician omniscience has been much eroded in recent years, but physicians still enjoy a great deal more public confidence than health researchers, insurance agencies, or bureaucrats.

Shifting the locus of control

As Enthoven points out, students of health care utilization have long ago exploded the myth that patterns of care are based on coherent professional standards of any sort, much less on standards based on scientific evidence. Indeed, the sorts of data that are generated through his glasnost proposals have played an important role in undermining that myth.

Moreover, managerial control is implicitly shared between payers and providers, in countries with universal payment systems, because governments impose direct or indirect controls on the physical and financial resources available to the health care system that clearly affect patterns of medical practice. But payers have largely shied away from direct intervention (Evans, Lomas et al., 1989). Only in the United States have private payers, under extreme pressure and without access to the sorts of global controls applied in other countries, begun to intervene in the clinical decisions of the individual physician.

One can make a strong case, as sketched by Enthoven, for more detailed intervention. There are many opportunities for improving the efficiency and the effectiveness of health care delivery on both sides of the Atlantic. Furthermore, it seems unquestionable that better data on which to base clinical and managerial decisions are essential to this process (e.g., Roper et al., 1988). But to become policy-relevant, this view must not merely be shared by the payers for and regulators of care. In addition, they

must believe that there is a political consensus among the general public that will support, or at least not strongly oppose, such intervention.

Political costs and benefits

The opposition of providers, and particularly of their organizations, can be taken as automatic. More effective and efficient management will, must, mean diminution, on average, of professional autonomy and incomes. The key question is whether any responsible political authority will be prepared to confront that opposition, data in hand, and argue a case for better management before the general public. Up until now, the answer in both Canada and Europe has been "no." Nor can the academic, comfortably isolated from both the battle and the consequences of defeat, honestly blame them. After all, the first man over the barricade gets the spear through the chest.

In such a political environment, with popular health care systems functioning at a bearable cost, why should Europeans go to the trouble of acquiring information that might be very dangerous to use? The evidence for significant potential improvement in efficiency and effectiveness may be compelling, but neither patients nor voters know that. Physicians will vehemently deny it. Better data might be a political embarrassment! Better management of health care is not, at root, a scientific problem requiring more research and more data, but a political problem of mobilizing support for intervention against the opposition of powerful and genuinely threatened interests. (These interests include private insurers, drug and equipment manufacturers, and hospitals and clinics, as well as physicians.)

The suggestion that Europeans would find it easier to establish mechanisms to improve the quality and effectiveness of medical practice, because they already have unified, comprehensive health care systems, reflects a technical view of the issue. The real question is whether, in a unified system, the opponents of such oversight mechanisms can mobilize more or less effectively to resist or subvert them.

The Canadian provinces, for example, have all had physician practice monitoring programs for a number of years. But they compare each physician's profile against norms defined by the contemporaneous behavior of his or her peers. By definition, therefore, the average practice pattern is the right one, and other patterns over broad ranges on either side are acceptable; as Enthoven notes, outliers are very few. There is no exogenous standard in this process, only consensus. As one (American) physician said, "We protect each other by all agreeing to make the same mistakes."

Perestroika: Restructuring the incentive environment

In all systems, many of those responsible for reimbursing and regulating providers of care have

now come to the same conclusions, in general terms if not in specific details, as the research community. Health care utilization (and cost!) does not result from the application of "well-established scientifically based standards," and in aggregate appears fundamentally arbitrary. But effective policy based on this understanding depends on the development among the general public of a broader political constituency that recognizes the tenuousness of the connection (in both directions) between health states and medical interventions. In Marmor's terms, the "political market" is at present seriously imbalanced on this issue (Marmor, Wittman, and Heagy, 1983).

As long as a large section of the public provides a receptive audience for allegations that quality is a linear function of expenditure, or at least of activity, and that only professionals know what is to be done, then payers and would-be managers of health care will have to intervene in "Stealth and Total Obscurity" (the alternative British name for the Department of Health and Social Security), if at all. The public information aspects of glasnost thus form a bridge between MIS and perestroika. Changing public perceptions through more and better information may—perhaps—restructure the environment of political incentives that presently constrains both public and private management. The feasibility of improved system management depends less on improved data per se than on the creation of a more supportive political environment in which to take managerial action. (Better data are, of course, relevant to this process, in that detailed management based on obviously faulty information loses credibility rather rapidly, especially in an adversarial environment.)

The lesson for Europeans, and Canadians, appears to be an old one: "You must educate your masters." But this process of information transmission is little developed or understood. Enthoven is undoubtedly correct that the United States has more examples of attempts to communicate directly with the public on medical matters over the heads of the professionals. But it is not at all clear that this has resulted in, or is moving in the direction of, a more supportive environment for the management of clinical activity. Intrusions on physician autonomy are increasingly occurring, but through private institutions that have no counterparts outside the United States, and the motivation and balance of benefit are contentious.

But there is much more to Enthoven's perestroika than public information campaigns. Attempts to graft various forms of managed competition onto European systems and to decentralize the payment and control processes are attempts both to change the incentive structures in which decisions are made, and also, importantly, to raise up new organizational allies for the existing payers. If governments alone do not have the credibility to challenge providers on matters that can be interpreted as falling within the scope of medical practice, then national variants of the sponsors, which Enthoven has described in more detail elsewhere (Enthoven and Kronick, 1989a and

1989b), may be called into existence or molded out of preexisting institutions to serve as counterweights to the health care delivery system itself. The progressive evolution of the District Health Authorities in the United Kingdom, partly under the influence of Enthoven's ideas, toward being purchasers of services on behalf of their populations rather than monopoly suppliers, is a clear example (*Working for Patients*, 1989).

But is it working?

There is, however, a critical distinction between the American experience as it is and Enthoven's vision of what it might become. He recommends, in the United States and in Europe, the creation of institutions independent of the health care system, "to get more informed choice into the system"—prudent purchasers on the patient's behalf, yet without the political constraints that inhibit governments. But he would be the first to admit that this has not yet happened in the United States. Despite the rapid expansion of various forms of managed care, now covering more than one-half of the employed and privately insured population, and even in those regions where perestroika is most extensive and longest established, the anticipated benefits—equity, efficiency, and cost control—have yet to emerge (Gabel et al., 1988).

Enthoven's reference to the "big success" of the prospective payment system (PPS) based on DRGs is premature; its impact on costs between 1983 and 1985 now looks like a one-time effect that did not influence the overall trend.¹ He might argue, and very justly, that the full structural requirements of informed and cost-conscious choice have not yet been put in place—his system has not really been tried. But the same might be said for Christianity—or communism.

The jury is still out on managed care in the United States. There is certainly a school of thought (e.g., Amara, Morrison, and Schmid, 1988) that argues that most such programs have placed little risk on providers and that the real "deep capitation," provider-at-risk revolution is yet to come. But others are losing heart—most notably the Chrysler Corporation—and national health insurance is, in 1989, back near the top of the American political agenda, after over a decade in the wilderness. This fact is itself a commentary on both the effectiveness of present forms of managed care and the perceived political feasibility of Enthoven's much more sophisticated form. Europeans should take note.

Decentralization: Accountability to whom?

Furthermore, there seems to be an essential ambiguity in the argument for decentralization. Do

¹It may also be relevant that a substantial decline occurred in acute care hospital use in Canada in the 1980s, without any change in the payment system—but under substantial administrative pressure (Evans, Barer et al., 1989). There may be several ways to skin a cat.

decentralized structures change the information and objectives of the general public—empowering the expression of more informed choice? Or do they merely weaken the expression of the views of the general public by eliminating centralized political accountability? Citizens of most European countries, which in this context includes Canada, are at root very satisfied with their health care systems, and have well-developed channels of accountability through which to express dissatisfaction in specific cases. Americans are unique in that they are not, and have not.

It may well be that Europeans should be less satisfied, and, in particular, much less confident in the professional institutions and decisions that determine their patterns of care. If they knew more, they would want less, and perhaps different things. But it is not clear, at least to this point, that decentralized reimbursement and control structures have been developed, anywhere, that empower more informed "market" choices rather than simply disempowering (however badly informed) political ones.

There is certainly room for improvement in all the European systems, and particularly in their balances of provider and patient convenience, as Enthoven points out. But—and this is the crux of the debate over the recent British White Paper (*Working for Patients*, 1989)—if provider incentives are changed, to which patients do they become more sensitive? Those with the greatest needs? Or those whom it is most profitable or professionally satisfying to serve (cream-skimming, or moving up-market . . .)? No one should underestimate the power of incentives. But it is easy to overestimate our ability to control or even predict their direction of effect, particularly if we rely on economic models of human behavior that are grossly oversimplified both in their postulates of objectives, and in their specification of the range of possible behaviors.

None of this is news to Enthoven; nor are we so naive as to imagine that existing systems of political accountability yield (nearly) ideal results. But it does suggest a good deal of caution in introducing restructuring proposals that may have unpredictable and far-reaching effects, into systems that appear to be basically satisfactory. Careful monitoring, piloting, and some clear idea of how one can withdraw if things work out badly would seem at least prudent.

Copayments: How not to decentralize

The varying national approaches to user charges provide a good example of the risks of decentralization. European and Canadian experience demonstrates that centralized financial controls over fees, budgets, and new capital outlays ("sole source funding") are relatively successful and politically acceptable, if not always popular. Decentralization of funding, in the form of substantial charges to individual patients or widespread private insurance, destroys this control. Providers of care in all

countries, recognizing this relationship very clearly, press for increased private funding and particularly greater charges to patients, explicitly in order to increase the flow of funds into health care.

The results of this form of decentralization—which is not at all what Enthoven is advocating—are displayed in the American experience. The poor, the elderly, and the sick spend a much larger share of their incomes on health care than does the general population. There is no evidence that Americans generally approve this distribution of burden, which most other societies would find, have found, unacceptable, any more than they favor the steady escalation of health care costs. Both emerge, not from anyone's conscious choice, but from a whole series of decisions by employers, insurers, providers, and patients. No one can control, or be held accountable for, the overall outcome.

Amazingly, many Americans continue to believe that at least user charges hold down overall health care costs, a view strengthened by the RAND study to which Enthoven refers. Yet this is clearly inconsistent with the observations that only in the United States, where such charges are most prevalent and most significant, are costs out of control, and that the loudest advocates of such charges in other countries are the providers of care, whose incomes would suffer if charges really did moderate the growth of health care costs.² Moreover, international comparisons suggest that the more rapid escalation of costs in the United States is traceable to more rapid price inflation (Poullier, 1989), consistent with the interpretation that user charges serve not to constrain utilization, but to undermine collective price controls.³

The RAND findings, that direct charges reduce care-seeking by patients, cannot be generalized to systemwide levels of utilization. That experiment, by design, excluded the effects of provider responses to changes in patient-initiated behavior, and consequent changes in provider workloads and incomes. Yet those responses, the information and advice given to patients, are the critical determinants of overall utilization. Attempts to interpret the RAND results as support for greater allocations of burden through user charges represent an elementary fallacy of composition and teach a strong negative lesson in both research and policy. (This negative lesson is reinforced by more recent reports from the RAND study (Lohr et al., 1986), which are much less sanguine about the impact of user charges on access to "needed" care and the distribution of their burden across the population, than those cited by Enthoven.)

²International opinions differ. In France, it seems widely believed that the "ticket modérateur" paid by patients helps to hold down costs. In the Federal Republic of Germany and Canada, patients are not charged for hospital or medical care. Health expenditure levels and trends are roughly similar in all three countries.

³Lest one fear the starvation of the health care sector, it is important to recall that the American experience is one of health care price increases that are much more rapid than general inflation rates (Levit, Freeland, and Waldo, 1989). Centralized controls in other countries manage to keep health care inflation more closely aligned to general inflation (e.g., Barer, Evans, and Labelle, 1988).

The paradox: Why restructure success?

So we have something of a paradox. The serious weaknesses of the American system are rooted in its decentralized structure; the advantages of European systems are rooted in their centralized funding control. Enthoven's perestroika suggestions imply greater decentralization. Might not a European (or a Canadian) reply: "If it ain't broke, don't fix it."? To what question is Enthoven providing answers?

Only diamonds are forever

Several, we think. Although Europeans are, in the main, satisfied with their systems, these are far from perfect and very expensive. Enthoven's MIS comments are well taken, and in a world of scarce resources should not lightly be dismissed. Further, his emphasis on "user friendliness" is also important. The convenience and comfort of the patient, although perhaps secondary to results achieved, are not trivial considerations. They can easily be neglected in the tug-of-war between payers and payees. Providers in all systems will respond that better service requires more resources; as a long-time student of management, Enthoven points out that the real answer is different incentives.

Perhaps most important, the political resistance to top-down global financial and capacity controls does appear to be growing. Such controls may, over time, become less effective and/or more expensive to maintain—the status quo may not be an option for the long term.⁴ A failure to develop the political and informational base for improved management could conceivably result in a slow drift towards "privatization" on the uncontrolled, inequitable, and expensive American model. There is no reason to believe that Europeans (much less Canadians) are immune to "the American disease."

Decentralized incentives within central controls

The trick is, exactly as Enthoven says, to find "politically feasible incremental changes" with "a reasonably good chance of making things better." These probably will take the form of increased decentralization of decisionmaking, but within a continuation of the quite-tight centralized constraints that apply in one form or another in the successful European systems. These critical constraints will continue to include:

⁴On the other hand, one must beware of being stampeded by Chicken Little cries that "the sky is falling"—the health care system in Country X is on the verge of collapse. Such claims are part of the everyday litany of providers negotiating for more resources in politically controlled systems—"orchestrated outrage" (Evans, Lomas et al., 1989).

- Global controls on health spending (not just public sector spending.)
- Separation of individual contributions from either illness experience or health status.
- Protection of the de facto universality of the European financing and delivery systems (some countries have separate arrangements for the wealthy, but not for the poor) against fragmentation.

Decentralization of funding, American-style, has strongly promoted competitive cost shifting, and concomitant escalation, and made overall control virtually impossible. (Do not worry about the size of the bill, you cannot do anything about it anyway. Just get someone else to pay.) At the same time, it has encouraged the distribution of the burden of health care costs according to both actual and expected illness experience—user charges and risk-related premiums—rather than according to ability to pay. Those with the greatest needs carry the greatest financial burdens or do without.

But this does not have to be the case—or at least so Enthoven believes (and we agree). Nor does he advocate a continuation of this pattern of financing in the United States, much less its extension to Europe; as noted above, he is one of the most clear-eyed critics of the present American situation. More sophisticated organizational design can make it possible to reconcile decentralized and better informed management of the specifics of care with centralized defense of the essential principles.⁵ Such changes will not be easy; they are both inherently technically difficult and will be strongly opposed or subverted. Among their opponents will be those who advocate decentralization precisely to break out of spending controls, and/or to redistribute the burden of costs back from the more to the less healthy and wealthy. But the process will certainly be interesting, and the stakes are high enough to justify the effort.

⁵The British White Paper, *Working for Patients* (1989) appears to represent such an effort, whatever one thinks of its chances for success.

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